

# The National Locksmith®

Shop the online store!  
TheNationalLocksmith.com

ELECTRO  
MAG  
NEEDED  
SDC



ACCESS  
CONTROL  
NEEDED  
CANSEC



JAMB  
PROTECTOR  
NEEDED  
MAJOR



HIGH SECURITY  
LOCKS  
NEEDED  
SARGENT



LOCK  
REINFORCERS  
NEEDED  
M.A.G.



CONTINUOUS  
HINGE  
NEEDED  
SELECT



Don't miss...  
DIRECT MAIL BONUS CARDS  
See center spread!

## OPENING THE DOOR TO GREATER PROFITS!

**On The Cover...**



Reap the profits from total door security and hardware installations with products from Select, M.A.G., Cansec, Major, Sargent and SDC.

**Publisher** Marc Goldberg

**Editor** Greg Mango

**Art Director** Jim Darow

**Technical Editor** Jake Jakubowski

**Senior Writers**

Sal Dulcamaro CML, Michael Hyde, Dale Libby CMS, Dave McOmie, Sara Probasco, Robert Sieveking

**Contributing Writers** John Blankenship, Tony Blass, Carl Cloud, Ron & Chris Curry, Mark Daniel, Richard Allen Dickey, William C. Deutsch, Giles Kalvelage, Tom Lynch, Tom Mazzone, Randy Mize, Tom Seroogy, Don Shiles, Jeffery M. Trepanier

**Director of Sales & Marketing**  
Jeffrey Adair

**Advertising Account Manager**  
Debbie Schertzing

**Accounting Manager** Sheila Campo

**Production Assistants** Dave Krofel  
Jenna Del Vigna

**Administrative Assistants**  
Cheryl J. Fiedler  
LaVerne Schertzing

**Shipping Manager** Allan Galvez

**National Publishing Co.**

The National Locksmith® ISSN #0364-3719 is published monthly by the National Publishing Co., 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861. Periodicals postage paid at Bartlett, Illinois 60107 and additional mailing offices USPS 040110. Subscriptions \$46.00 per year in the USA; \$58.00 per year in Canada; \$72.00 in all other countries. Single copies \$7.00 each. Postmaster, please send change of address to National Publishing Co., 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861. ©2002 by the National Publishing Company. All rights reserved. Printed in the U.S.A.



The  
Audit  
Bureau  
Member



**BPA International Membership**  
Applied for August 2001

(630) 837-2044 • Fax: (630) 837-1210

E-Mail: [natllock@aol.com](mailto:natllock@aol.com)

See us on the World-Wide Web:  
[www.TheNationalLocksmith.com](http://www.TheNationalLocksmith.com)

# CONTENTS

The National Locksmith April 2002 • Vol. 73, No. 4

## FEATURES

**COVER  
FEATURE!** **18**

**The SmartLock Online Controller  
From Cansec**

*Multi-function access control capabilities.*

**68**

**Churchill Safes**

*The next British invasion.*

**COVER  
FEATURE!** **26**

**Door Hardware**

*The latest offering in door hardware.*

**70**

**Multimeters, Part 3**

*Differences between analogue  
and digital multimeters.*

**COVER  
FEATURE!** **30**

**Continuous Geared Hinges**

*Solving sagging door conditions.*

**92**

**Pin Kit Upgrade**

*Making a minor modification.*

**34**

**1970 Mercedes Benz 250, Part 2**

*Concluding this two part series.*

**44**

**Quick Entry Update**

*2002 Chevrolet Avalanche  
and Cadillac Escalade EXT.*

**110**

**2001 Honda CBR1100XX, Part 2**

*Concluding with the seat lock.*

**48**

**Everest Primus Debuts, Part 2**

*Concluding the Everest functions  
and features.*

**CODES 129**

**Toyota, Part 3**

*5001-69999.*

**54**

**Tubular Key Machines, Part 3**

*Concluding with the Framon TKM-100.*

**62**

**Free Literature And Brochures**

*Get the latest product information.*

**157**

**TheNationalLocksmith.com**

*Visit us online for technical forums, chat,  
online store plus visit out sponsors.*

## DEPARTMENTS

**5** COMMENTARY

**88** THE LIGHTER SIDE

**6** MANGO'S MESSAGE

**99** THE CASH STATION

**10** LETTERS

**102** TECHNITIPS

**12** SECURITY CAFÉ

**120** BUSINESS BRIEFS

**76** BEGINNER'S CORNER

**158** TEST DRIVE

# COMMENTARY



www.TheNationalLocksmith.com

## On sunshine and Selectrics...

A few days ago I asked a friend where he would choose to live if he could reside any place in the world. He thought about that for a few moments, then he replied that he would live anywhere he had a good internet connection.

Personally, I'm a little pickier about my surroundings. I love Chicago for its architecture, culture, fun, beaches, parks and atmosphere. But one of these days I'd like to wake up on a morning in February and find out that the weather is going to be sunny and 75 degrees out, just like yesterday, and the day before.

But you know what? I'm still going to want a good internet connection too! I remember how reluctant I was to part with my IBM Selectric typewriter in favor of my new, little plastic looking word processor. This was back in the middle 80's, and the IBM was a chunky, solid machine that could rupture a couple of vertebrae if you hefted it too often. The word processor was not only incomprehensible, but it couldn't have weighed more than four or five pounds.

Frankly, from the beginning I just didn't trust the darn thing. Oh sure, I could read my words on the dinky screen, but I didn't trust those flimsy plastic disks for storing my articles. Now, when I think back on the concept of a little whirling ball striking letters through a ribbon of black film, I realize I don't miss the technician who used to call on me twice a year to keep all those IBM moving parts, well, moving.

Twenty years ago there wasn't a locksmith business that used a computer for much more than watching toasters fly around the screen. If we wanted information, we turned to a huge bookshelf solidly packed with code books for example.

Today, we can barely sell a paper code book. Everyone wants their codes on computer, and not only that, but most every book we now publish on paper also comes out on CD. Even those trusty back issues of *The National Locksmith* are put onto CD, and I quit saving paper back issues a long time ago.



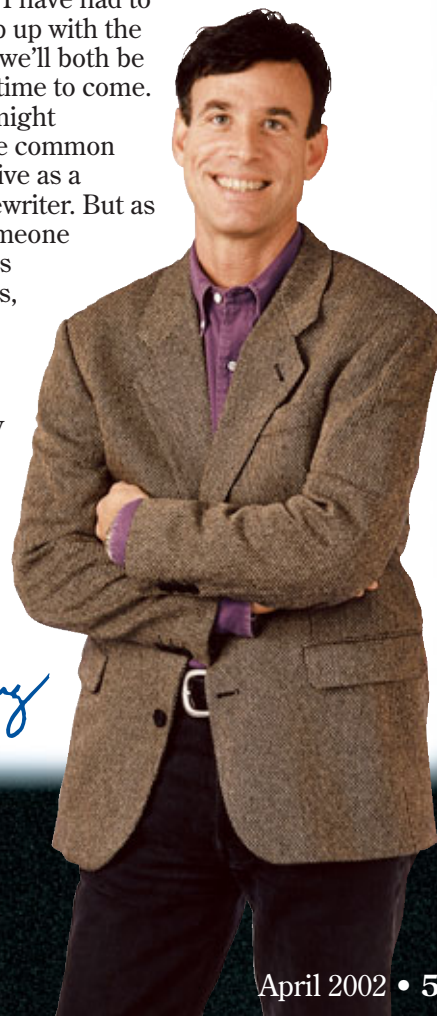
Locksmithing is all about information. As a 'smith, you have to know everything about security ranging from cars and safes to doors and desks. Now it's easier than ever before to find the data you need by popping in a CD and looking it up, or going onto TheNationalLocksmith.com and asking your fellow locksmith for a push in the right direction.

We still enjoy holding the paper copy of this magazine in our hands every month though. But I still think that the cost and speed of color printers are going to get better and better with time. One of these days, you might receive your magazine by e mail, seconds after it is prepared, and print it out in a couple of minutes in color, right there at home or in the office.

So I don't much miss my IBM Selectric as much as I used to. I'm saving it for a few more years though. One of these days I'll put it on Ebay as an antique. Yes, you and I have had to keep up with the times. But I think we'll both be around for a long time to come. Sure, biometrics might someday make the common key look as primitive as a Royal manual typewriter. But as long as there's someone around to covet his neighbor's goodies, locksmiths will be there to clean up the mess.

I wonder if they have good internet connections in Cuernavaca, Mexico?

*Marc Goldberg*



**Have questions? Want free technical help?**  
**Free Locksmith Forums!**

www.TheNationalLocksmith.com

**Marc Goldberg**  
Publisher

# Mango's Message

**T**here has been quite a stir generated by an article that was published in The *New York Times* newspaper a few months back. On February 22, 2002 reporter Matthew L. Wald, wrote an article titled "Why Keys Cost a King's Ransom." The story was about the high cost of automotive transponder key duplication and the limited service resources available to customers.

Wald stated that automotive keys that once cost a buck or two to duplicate, can now cost as much as a monthly car payment. One Virginia Lexus dealer he surveyed informed him that a replacement key to an RX 300 would cost \$300. A Ford dealer said a Taurus key cost \$130.

Wald went on to say that dealers have the market mostly to themselves, because very few locksmiths, or hardware stores, can copy the keys to late-model cars, stating that: "The technology is beyond their capabilities."

The article went on to describe the basic operation and design of a transponder system, its security, and why it was designed – which we all know was to deter theft.

Wald then did an interview with Randy L. Simpson, president of the Associated Locksmiths of America (ALOA). His interview with Simpson created the buzz.

Simpson was quoted as saying the following. I have extrapolated only the paragraphs that include or refer to Simpson, and will number each paragraph for reference.

1. Moving to the transponder system has had several effects. One is to cut out locksmiths. "It can run up to \$50,000 for the equipment to duplicate the keys for cars," said Randy L. Simpson, president of the Associated Locksmiths of America, a trade association based in Dallas. And that is for each manufacturer; equipping a shop to make keys for all car brands would be well beyond the means of most locksmiths.

2. Mr. Simpson said a glance at older cars would explain why a new key system was needed. "Mechanical devices were defeated in all kinds of different ways," he said.

3. One way to defeat a mechanical key is simply to pry the whole lock mechanism out of the steering column and connect the internal wires. But that will not allow a car with a transponder to start because hooking up the wires does not send the proper code to the engine-control module, the computer that runs the fuel-injection system.

4. Another effect is that the car owner is now at the mercy of the dealer's service department. The amount the dealer charges to make a key partly depends on labor rates, and partly on how the lock system is made.

5. For example, on a 2001 Ford Taurus, the car can "teach" a key the proper code. But it is built to do so only if the technician starts the car with one of the keys that

## A Missed Opportunity for Locksmiths

came with the vehicle, turns it off, starts the car with the second key that came with the vehicle, turns it off, and then inserts the new key - with the metal shaft, mechanically cut and the transponder unprogrammed and awaiting instructions.

6. Lose one of the factory keys and the procedure is much more involved; it means making two new keys and teaching both of them the code, Mr. Simpson said. The Ford dealership here charges an hour's labor for that, at \$85 an hour, plus \$45 for the key.

7. The Lexus key is a bit more complicated. Its oversize head includes not only the transponder but also keyless-entry buttons.

Simpson is then not referred to until the very last paragraph in the article, where he references transponder security and the impact it has had on auto thieves, saying:

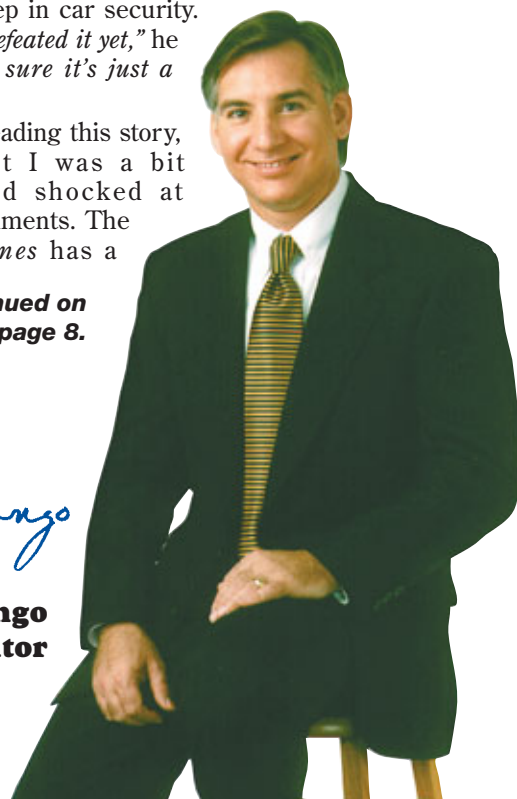
8. But however good the system is, Mr. Simpson of the locksmiths association said this was not the last step in car security. "They haven't defeated it yet," he said. "But I'm sure it's just a matter of time."

After first reading this story, I must admit I was a bit dismayed and shocked at Simpson's comments. The *New York Times* has a

**Continued on  
page 8.**

*Greg Mango*

**Greg Mango  
Editor**





Continued from page 6

weekday readership of 1.1 million, and another 10 million who visit their web site. As the president of ALOA, I initially viewed this as a missed opportunity for Simpson to promote locksmiths and the services they offer to a very large audience. Instead of saying that locksmiths were a viable alternative to dealers for such services as transponder duplication and origination, he was interpreted to say that locksmiths were not an option for such services, and the dealer is the only choice customers have. That doesn't do, or say much for the industry, does it? Especially when the statement comes from the president of a national locksmith association.

After closer examination of this article, however, I believe the interview with Simpson is a bit ambiguous and misleading. I questioned whether it was really a missed opportunity by Simpson, or a manipulated opportunity by Wade. Not necessarily manipulated in a vindictive intentional way, but to slant a story for more interest.

In all eight paragraphs where Simpson is mentioned, or inferred to, only four sentences contain quotations.

Quoted sentences (" ") usually indicate that the prose presented is a first hand account as described, and transcribed explicitly by the reporter. Non-quoted sentences usually indicate that the reporter or writer paraphrased the prose presented. In other words, it may not have been exactly what was said, but an interpretation of what was said. This is commonly done because of space limitations, or because the reporter or writer wanted to present a predetermined angle or slant to the story. All it takes is the manipulation or elimination of a few key words here and there, and the story takes on a whole new meaning from what was initially told.

I'll admit I am dissecting this story to give Simpson the benefit of the doubt. In my opinion, the most damaging implied reference Simpson said, which is not in quotes is: *Equipping a shop to make keys for all car brands would be well beyond the means of most locksmiths.*

You may think that the most outrageous statement Simpson said, which is in quotes is: *"It can run up to \$50,000 for the equipment to duplicate the keys for cars."* This was an ill-informed comment, but not damaging to the locksmith. You must remember that this story was in *The New York Times*. Readers of the Times don't care how much you have to invest in equipment, they just want to know if you can do the work. Those readers came away with the impression that you can't. That's damaging.

That aside, my main question in all this is why Simpson didn't see this as a tremendous public relations opportunity, and seize the moment to promote locksmiths to a few million people?

I called Simpson for his comments and presented him with that very question. This is his response:

*"As ALOA's president, I am in a unique position to serve our membership through various media, and through all of the opportunities I have to network with various people in our industry. I have done a great job of promoting ALOA so*

*far, and I intend to do even better in the future. But with regards to the NY Times article, and your thought that I missed an opportunity to promote ALOA in that article, I would like to clarify what really happened.*

*I spoke with someone recently who took my comments and published them in The New York Times, in an article that included a report on how expensive it is to compete in today's automotive locksmithing industry. I have only a vague recollection of that conversation, as the NY Times reporter never identified himself as such; instead, he spoke with me as if he was a customer, and for that reason, I answered him as I do all my customers as a shop owner, and not as the ALOA president. Unfortunately, the story that appeared in The New York Times had some inaccuracies, many of them regarding my comments, several of which I never said, all of which were taken out of context. I gave no statements as the ALOA president to The New York Times, and in fact never even had the chance. I would liken the situation to being challenged to hit a bull's-eye blindfolded.*

*There are two things I do remember saying to the person who turned out to be a NY Times reporter. One was that I no longer do automotive work in my own locksmith business. The second is that I remember saying that the automotive locksmithing market is becoming specialized.*

*A full twenty percent of the classes ALOA offered last year covered all aspects of automotive locksmithing work, and in addition, there was at least one technical article in every issue of Keynotes that dealt with various aspects of the current automotive side of locksmithing. We do our best to not get tricked by crafty reporters, and according to you, sometimes we fail. Did I fail? Did I miss an opportunity? Maybe; it certainly wasn't my intention for my statements to be misconstrued and negatively spun later in The New York Times. My goal is never to put as negative a spin on something as I can; apparently some members of the media don't share that goal with me.*

*My focus is always to work hard for ALOA, to help promote the profession, and all locksmiths in general. To that end, there can be no misunderstanding: Serving members is one area in which ALOA never fails."*

Positively,

Randy Simpson, CML

There was a time when locksmiths were unable to service transponder equipped vehicles and keys. There was also a time when locksmiths were unable to service VATS equipped vehicles. That's no longer the case today, however. With the introduction of Jet's ETD-1 and ETD-1 Jr.; Kaba Ilco's RW2; Auto Security Products TCL-1; HICKOK's NGS; Chrysler D.A.R.T.; Mitsubishi MUT2, and services for Toyota and Lexus, locksmiths can now service most transponder equipped vehicles.

Even with all these units (and you don't need them all), the total investment is not \$50,000, but \$13,485.00. If you're not servicing transponder equipped vehicles, you should be. There's "Gold" in them there transponders, and the tools are available to get it!



April 2002

# Letters

*The National Locksmith* is interested in your view. We do reserve the right to edit for clarity and length.

## Going Beyond the Call of Duty...Your Reward Comes When a Child Smiles Back

It's every parent's nightmare - their baby locked inside a car along with the keys, a buzzing bee and you can empathize with one Mohegan Lake mother's predicament. But a good Samaritan in the guise of a locksmith came to her aid, rescuing the 5-month old child from inside a 1998 Mercedes Benz.

The frantic mother called the Mercedes Benz dealership where she bought the car, but got no help. The dealer told her the only way inside would be to break a window, but some Mercedes models come equipped with shatterproof windows to deter carjacking. Police then called for locksmith Leland Imm, owner of Reasonable Locksmithing in Montrose, New York who also serves as a volunteer firefighter.

Imm said he charges a minimal fee or nothing at all for services when children are locked inside a car, even if the parent insists. Imm

tells them to donate the money to their church. "If you give something back to your community, it comes back to you one way or another. And even if it doesn't, you've still done something for someone. Your reward comes when that little child smiles back at you. That's worth a million dollars," Imm said.

Leland Imm  
New York

## Door Doctor Response

Thank you for your Mango's Message editorial on "Door Doctor" in the February issue. I have finally been paid for all the services contracted with Door Doctor for Blockbusters and Circuit City. However, this has been several years ago. I had to continually fight for one ticket to get paid. After several months it paid off, though it was hardly worth it. They were unusually slow to pay.

I try not to do this type of work anymore for unknown out of state companies. However, if I have a slow period and I do not have to lay out \$1000 in expenses, I will usually give a company one chance. I would like to bring attention to a company called "Facility Maintenance Services LLC". I took a chance with this company. I was paid, however, it still took more than 60 days to receive a payment. They say they pay within 30-37 days of receipt of the invoice. I usually mail the invoices the same day or by the next day, and this invoice was also faxed to them the same day. I suppose it was quarantined with some important government mail.

I know there are probably legitimate contract businesses out there that pay on time. However,



this company has similar documents and policies to Door Doctor. They also contract for HVAC, plumbing, and electrical service.

Has anyone else had experience with Facility Maintenance Services LLC? Their address is: 301 Industrial Lane, Avondale, PA. 19311. Phone: 800-754-1195, (601) 268-1560; Fax: (610) 268 1564 Web: [www.facilitymaintservices.com](http://www.facilitymaintservices.com). I would be interested to hear how others feel about doing business with this company.

Thank you again for bringing attention to the Door Doctor debacle.

T. Hopkins  
Tennessee

## Wrong Number

In the February Beginners Corner column on "Key Blanks," we inadvertently printed Jet Hardware's fax number as a contact number instead of the phone number. The phone number for Jet Hardware is: (718) 257-9600. Give them a call for your key blank needs or to receive their catalog.

The National Locksmith  
1533 Burgundy Parkway  
Streamwood, IL 60107  
Attn: Editor

# Security Café

**DROP IN FOR  
TOOLS, TECHNOLOGY  
& EQUIPMENT**

## Lund Dual Lock Key Cabinet



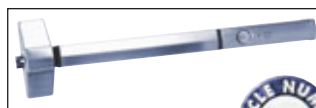
CIRCLE NUMBER  
281

This Lund dual lock key cabinet requires the presence of two key holders to open it, providing the extra security needed for high security hospital, medical or pharmaceutical applications. The cabinet may be installed on a wall or may be portable. Capacities can be as large as 2280 key hooks in a floor cabinet or 3400 key hooks in a four drawer key cabinet.

The Lund Key Cabinets are made from 18-gauge steel, with electrically welded construction and come in either light gray or sand color. Doors have dual locks, but can be ordered with single key or combination locks. Index pockets on the doors are extra.

Lund offers more than 70 styles of key cabinets and panels.

## Yale Security Group SecureX



CIRCLE NUMBER  
282

SecureX is an electromechanical delayed-egress exit device used to secure interior or exterior openings. When armed, it delays egress for 15 or 30 seconds upon

depression of a push pad. Once the delay cycle is timed out, the device releases for egress; however, it remains armed to sound an alarm until reset.

SecureX is the next step in the evolution of Yale's 7100/7200 Exit Device series. The product is ideally suited for a variety of commercial applications and government buildings, allowing a delayed exit during emergencies or immediate exit during fire evacuation.

## Alarm Controls Corporation



CIRCLE NUMBER  
283

Alarm Controls Corporation has a new "Request To Exit Station," which meets the Boca Code for access controlled exit doors.

The Request To Exit station has a set of 30-second S.P.D.T. timed contacts, rated 2 Amp @ 35 VDC or 120 VAC and a set of S.P.D.T. momentary contacts, rated 10 Amp @ 35 VDC or 120 VAC.

The Switch is mounted on a standard stainless steel single gang wall plate; the assembly has color-coded leads for wiring. All components are UL approved and CSA certified.

CIRCLE NUMBER  
285



## Videx CyberLock™ Switch Lock

The unique design of all CyberLock cylinders allows you to transform a standard mechanical lock into a full-functioning access control system. With CyberLocks you can restrict access for authorized users to specific days and for specific times during those days. In addition, a record is made each time someone gains entry and each time entry is denied, providing a precise record of who, what, when, and where for management review.

The on/off version of the CyberLock switch lock operates with two home positions. One home position can be set for on and the other home position, located at 90 degrees clockwise rotation, can be set for off. At either of the home positions, the key can be inserted and removed. This version of the switch lock is ideal for control panels, access to electronic security systems, and elevators.

## Ilco Unican's Universal Cylinders



CIRCLE NUMBER  
284

The 1500 Universal Combination Cylinders by Ilco takes flexibility to the max! A tailpiece assortment is included standard with every 1599 cylinder and enables this knob/converta cylinder to be used as a key in knob, key in lever, single deadbolt or double deadbolt cylinder. The screw-on cap

plug/tailpiece retainer insures ease of tailpiece installation and durability.

The versatile 1599 Cylinders are available in over thirty of the most popular keyways and fit many different applications. All 1599 Cylinders feature the strongest, best designed tailpieces in the replacement cylinder market, able to withstand up to 70 inch pounds of force. These high quality cylinders are Master Key and Grand Master Key compatible into OEM Systems.

## Master Lock Safety Lockout Padlocks

Customizing your safety lockout system to your facility's particular needs

**Continued on page 14**

## SECURITY CAFÉ

Continued from page 12



### **286 Master Lock**

helps ensure employees automatically and correctly lock out hazardous energy every time. Master Lock helps simplify the task of implementing and maintaining an effective lockout system by offering a variety of customization options.

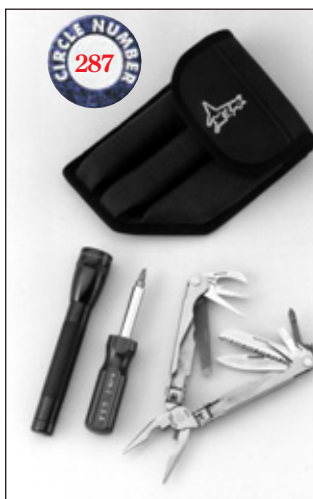
Solid body aluminum padlocks are available in six vibrant colors, and lightweight Xenoy thermoplastic padlocks are available in eight bright colors to allow color-coding by department, plant or job level.

Master Lock padlocks can be customized with laser engraving on the front and sides of the padlocks with the company name, logo, employee name, key number, and other information. Padlocks can also be customized with adhesive 'Danger' labels that accept employee photo, employee clock number or key number.

### **Jensen's Multi-Tool Kit**

Jensen Tools Multi-Tool Kit includes the versatile SOG Paratool, the Mini Maglite and a miniature 4-in-1 screwdriver, in a sturdy Cordura Plus three-pocket pouch with a handy belt loop.

The star of this kit is the Paratool, featuring needle nose pliers, 3" straight point blade, 3" serrated sheep foot blade, 3 flathead and



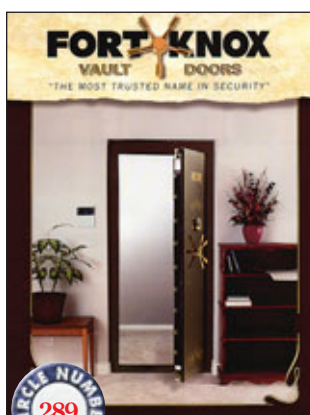
1 Phillips screwdrivers, can/bottle opener, awl, file (fine, coarse edge cut), thumb tab/lanyard hole and measuring scale. Length open is 6.4", closed 4".

### **Micro Cabinet Lock**

The new SDC 290 Micro Cabinet Lock is designed to secure drawers and cabinets. Keys are eliminated, while the addition of a keypad or remote control provides convenient access control. Electronically secure pharmaceutical, gun, file and utility cabinets or retail and museum display cases. The cabinet lock has vertical and horizontal alignments. It is non-handed, omni directional, fail secure and reversible for fail-safe operation. Available in low current, 12 or 24 VDC, applications include drawers or cabinets and display cases with swinging or sliding doors.

### **Fort Knox Vault Door In-Swing**

Fort Knox has developed the Vault Door In-Swing. With an inside release mechanism, the inside swing vault door will allow the door to open even if debris has fallen in front of the door. This will allow the vault to be used as a



personal shelter in addition to securing your valuables. It is designed for easy installation for a walk-in security room.

The massive 1-1/8 inch, fire protected reinforced steel door can be set in a pre-formed concrete or cement block opening. The rack & pinion, multi-gear drive-locking mechanism incorporates a 5 to 1 reduction to insure a smooth, positive and virtually maintenance free lock up. Available in eight luxurious colors and backed by a lifetime warranty.

### **Marks USA Key-In-Lever Locksets**



ANSI grade 1 and 2 Survivor series, key-in-lever cylindrical locksets, in two distinctive lever designs are now available from Marks USA. The "American" design with an angular return, and the "Crescent" with a smooth rounded lever, both returning to within 1/2" of the door surface.

Both designs feature the "Clutch" mechanism, which prevents forced entry and damage to the lock by disengaging the lever from

the lock before damage can occur. Marks locksets feature a lifetime mechanical warranty. All Survivor locksets are UL Listed for 3-hour fire rating and satisfy all ADA requirements.

### **IEI Door\*Gard Intelligent Lockset**

The Door\*Gard LS-1 combines IEI keypad technology, with a rugged Grade 1 lockset, to form the perfect indoor/outdoor system that is as durable as it is attractive. Plus, it's easy to install, with no hard wiring and features all the functionality and the same programming you'd expect from IEI.

The durable alpha-numeric metal Braille keypad has 120 users, with a code length of 1 to 6 digits for over 1 million possible combinations. The Door\*Gard LS-1 is powered by four standard AA batteries that provide up to 150,000 uses. It also features a two stage low battery alert to assure entry.

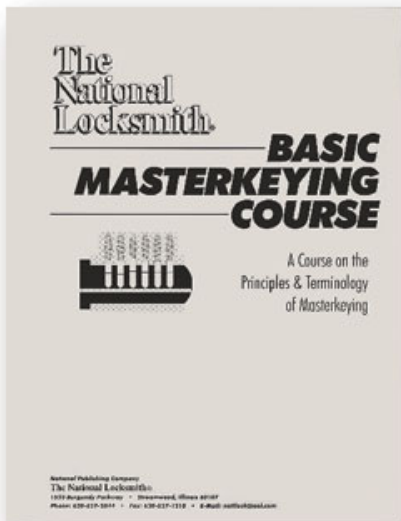
It is available in conventional Cylinder and Interchangeable (IC) Core versions. Cylindrical, mortise, and tubular locksets are offered as well as four standard trim designs. The Door\*Gard LS-1 is UL listed, as well as ANSI and ADA compliant.

### **Motive Service & Supply**



Motive Service and Supply has an all-new Black Max Series Spare Tire

# Basic Masterkeying Course



13 Lesson  
450 page course

The Basic Masterkeying course is designed for the locksmith who wishes to become proficient in Basic Masterkeying.

[CLICK HERE TO LEARN MORE](#)



#MK - 1

## S E C U R I T Y C A F É

### Continued from page 14

Winchlock for pickup trucks and SUV's. This modular designed lock produces two distinctly different maximum-security spare tire locks. A bar type Winchlock for most applications and a universal cable type Winchlock for all applications featuring a 5/8" solid wire core - vinyl coated with one end attached permanently to the lock.

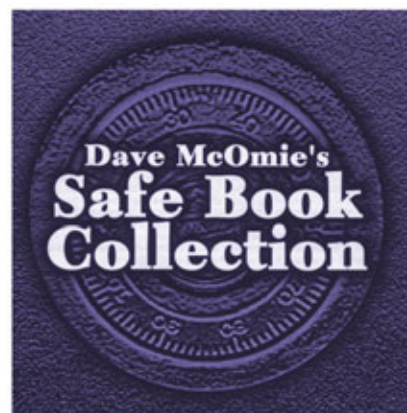
### SDC EMLocks



All SDC electro-magnetic locks now comply with positive pressure requirements of standard UL 10C and are classified in accordance with UBC (Uniform Building Code) Standard 7, Section 2, "Fire Test of Door Assemblies" designed to increase protection of life and property in a fire. The Emlock design also eliminates the need for unsightly black epoxy and potential for toxic fumes in a fire. SDC Emlock's are Listed in UL categories Auxiliary Locks and Burglary Resistant Electrically Operated Locks. Available in 1650 lbs, 1200 lbs, and 650 lbs holding force SDC. Emlocks are BHMA certified as meeting ANSI holding force requirements.

TRL

## Dave McOmie Safe Book Collection on CD



This CD contains every book Dave has ever published.

[CLICK HERE TO LEARN MORE](#)



#DMCD - 1

# The SmartLock Online Controller

from Cansec

By  
Richard  
Allen  
Dickey



**F**ounded in 1987, Cansec is headquartered in Mississauga, Ontario, Canada. Cansec is a privately owned Canadian corporation, specializing in the design and manufacture of Access Control and Monitoring Systems. Note that I said systems, not just pieces and parts. They have been designing complete systems for 15 years.

On June 20, 2000, Cansec announced the addition of its SmartLock Online Access Control System. SmartLock Online is available in complete single door, iButton™ (Dallas chip) or Proximity packages. Each package includes a reader and a door controller.

Each SmartLock Online controller is equipped with outputs to power an electric lock, as well as control a power door operator. Inputs are provided for a Request-to-Exit Button, a Handicap Access Button and a Door Contact.

When the Door Contact Input is connected, the reader will automatically relock the door once it closes. In addition, an audible alert can be generated if the door is held open longer than a specified amount of time.

The Wiegand (pronounced weegand) compatible controller can also be purchased separately and supports industry standard Wiegand formats. This means that you can use your favorite manufacturers (Wiegand compatible) reader with the SmartLock Online door controller.

Here is a money saving feature. The software for the SmartLock Online door controller is free. It is designed with all the basic functionality required for most installations and is capable of controlling 30 doors and 4800 cardholders. Did you catch that free part?

If any of this catches your interest, I have included a complete list of features and specifications at the end of the article. For those like me that like pictures, the fun starts now.

I got the Wiegand version to review. The model number is "CA-SOW". The controller mounts in a standard double gang electrical box. (See photograph 1.) Each controller is designed to work with only one door, but you can have as many as 30 controllers at any one site.

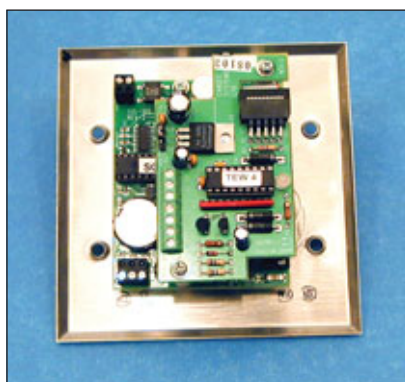
The controllers are linked together with a standard, shielded, single twisted pair. This same cable

can continue to other controllers if more than one is used. The maximum distance for the cable is 2000 feet. That's a long way! How can it work over such a long distance? They use a line driver.

The line driver is the little black box that connects the computer to the controllers. I removed the cover just to give you a peak inside. (See photograph 2.)

There are two external connections on the line driver. (See photograph 3.) The three screw down terminals are attached to the single pair wire that runs to the controller. The other connection is a standard 9 pin "D" connector that connects to the computers serial port.

The controller can be powered by 12 VDC or 12 to 16.5 VAC. Your



**1. The SmartLock Online Access Control System can be mounted in a standard double gang electrical box.**



**2. The computer talks to the controller through a line driver.**

power choice will depend on the type of lock and reader that you use in your installation.

I really like the connectors on the door controller. They are screw down connectors that slide onto pins on the controller circuit board. (See photograph 4.) The really nice thing about the connectors is the ability to quickly replace a controller if needed. It also makes it easy to connect wires if the connection is in a tight location, like under another circuit board. (See photographs 5.)

A typical reader for a system like this, could be the HID 6005 proximity reader. (See photograph 6.) The HID 6005 uses the industry standard Wiegand format and is completely sealed to prevent water intrusion.

To go along with the Proximity reader, you will need a few Prox cards. The cards are considered passive because they do not use a battery. When you take one apart, you can see a coil of wire and a small microchip inside. (See photograph 7.) It's just amazing what you can do with electronics!

The reader is connected to the controller with seven wires. (See photograph 8.) Two are for power, two are for data transfer and the other three are for LED's and a buzzer. When are we going to get to the computer part? Right now!

The SmartLock Online system is controlled by a computer. I have worked with computers since they first came out in the early 80's. Anyone heard of the "build it yourself" Zenith computer? I didn't think so. Anyway, I have had my bad days, but like them or not, they are here to stay. In case you are curious, I like them a lot!

The free software that comes with the SmartLock system has all of the most common features you would expect. It comes on two floppy disks and is very easy to install.

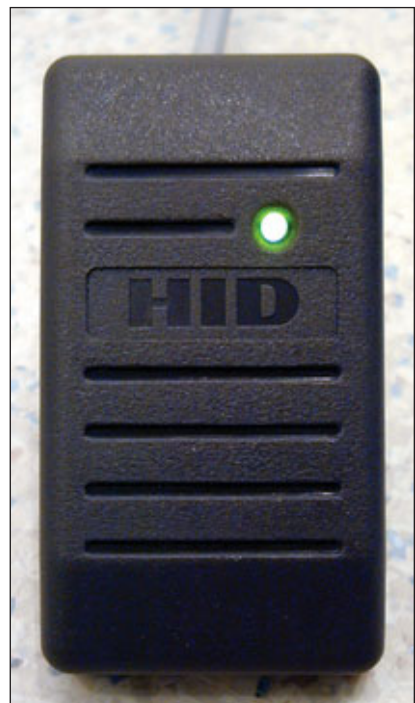
When the program is run, you will see a window that starts with a site view. (See photograph 9.) By selecting an icon on the left of the window or by using the "view" pull down menu, you can look at all of the other views that are available. (See photograph 10.)

The reader view will list all of the door controllers at the site. By selecting an option from the list across the upper portion of the window, you can add new controllers, edit existing ones or remotely lock or unlock a door. (See photograph 11.)

The way the system can tell one controller from another is through an identification number. The number is entered in an address box, in the reader description window. (See photograph 12.) How do you know what number to put there? Well there is a little switch pack located close to the battery on the controller circuit

board. (See photograph 13.) The instructions with the controller tell you how to set the switches for numbers 1 to 30. In this case the switches are set to "1".

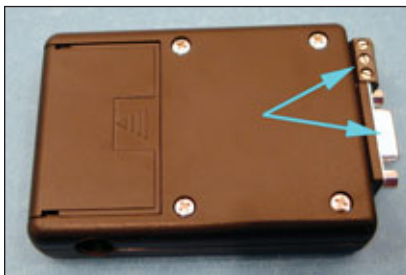
The unlock view will allow you to set up to 60 unlock schedules per



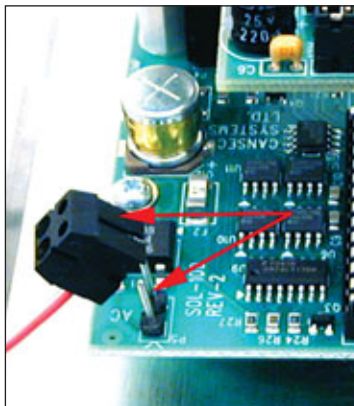
**6. The HID 6005 Proximity reader works great with this system.**



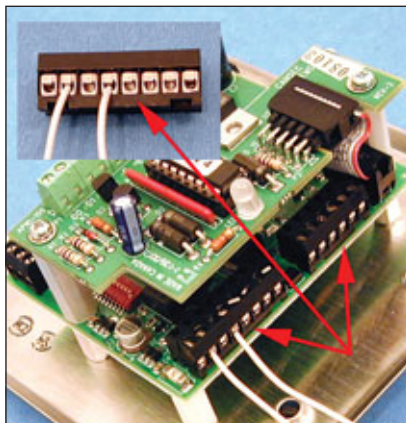
**7. Here is a prox card that goes with the HID reader. Notice the coil of wire inside that acts as an antenna.**



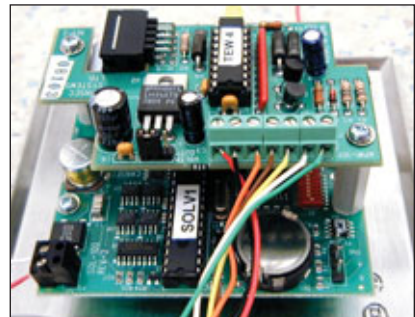
**3. There are two connections on the line driver. One is a 9 pin "D" connector that connects to the computer. The other is a screw down terminal to connect the single, shielded, twisted pair cable that runs to the controller.**



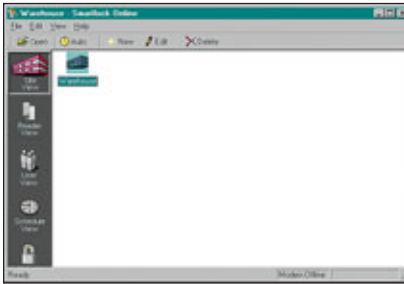
**4. The connectors are a nice screw down type that slide over posts found on the circuit board.**



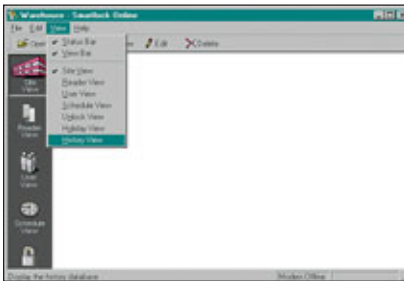
**5. These connectors make it easy to use in hard to reach places.**



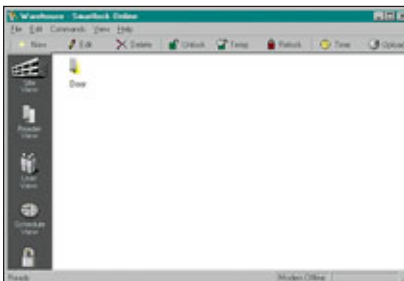
**8. The reader is connected to the controller by seven wires.**



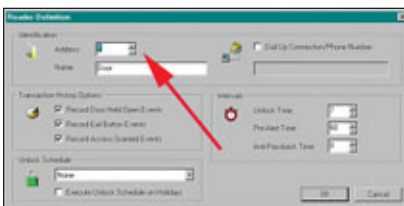
**9. The first window to appear when the software is run is the site view.**



**10. Different views are accessed either by selecting a view icon on the left side of the window or by using the "view" pull down menu.**



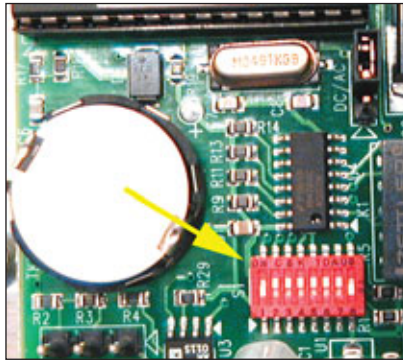
**11. Reader information is accessed from the reader view window.**



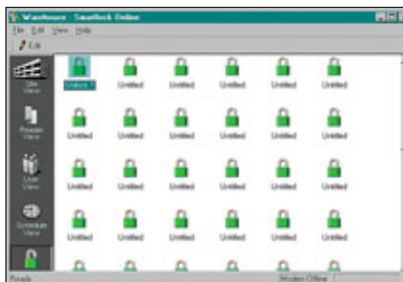
**12. Each reader is connected to a separate controller. The controller identification number is entered in the address box under the reader identification window.**

site. (See photograph 14.) The unlock schedule will tell a door when to automatically lock and unlock. The times are set in the unlock schedule. (See photograph 15.)

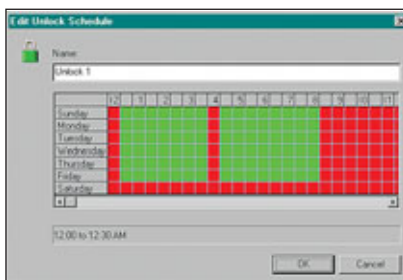
The user view will allow you to set specific information in the system for each user. (See photograph 16.) When you edit a user, you can



**13. The address for the controller is found by reading the switch positions on the controller circuit board.**



**14. The unlock view will allow you to set up to 60 unlock schedules per site.**

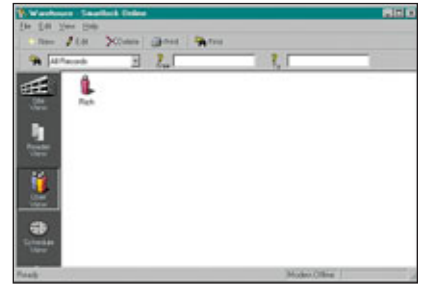


**15. To set the unlock times, just edit the unlock schedule.**

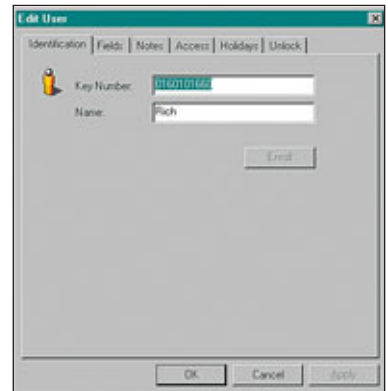
change the name and also assign a prox card. (See photograph 17.) The numbers are stamped on the prox card and consist of a total of 10 numbers. Other information like notes, unlock and access schedules, can be viewed or edited. (See photograph 18.)

My favorite is the history view. In this view you will be able to see a history of what has happened at each controller. (See photograph 19.) The date, time, user name, card number and more will be displayed. Up to 1000 events can be stored in the controller. After 1000 events, the oldest is overwritten. These events can be uploaded to the computer for viewing or to be saved as a history file.

Did I mention the cost of this



**16. The user view is where you can store up to 4800 users.**



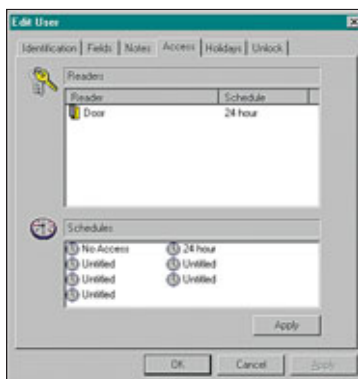
**17. When adding a user, the user name and a 10 digit key identification numbers is entered.**

system? It is impressive. The controller with a proximity reader is \$257.00 to the locksmith. If you only want the controller it is \$197.00 to the locksmith. The line driver is \$64.00 and the software is free. I can see a lot of opportunities here.

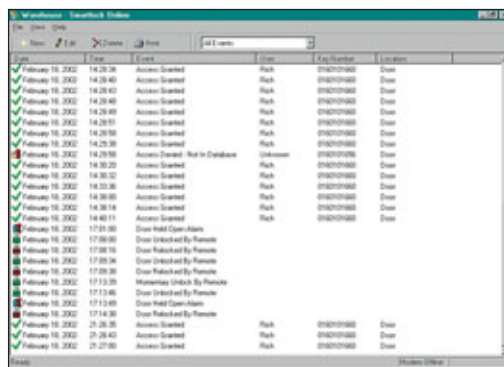
Here are the specifications I promised in the beginning of the article. There is some good information to review if you have a customer that is looking for an access control system and doesn't want to spend a lot of money.

SmartLock Online features:

- Simple to Install and Operate
- Unlimited Number of Sites
- Up to 30 Card Readers per Site
- Up to 4800 Cardholders per Site
- Software for Windows® 95/98/NT/2000
- Remote Site Dial-Up Capability
- Timed Anti-Passback Feature # (1-255 Minutes)
- Handicap Door Operator Output
- Automatic Door Unlock Schedules
- iButton™ and Proximity Versions
- Some of the specifications for the door controller include:
  - Reader Type: iButton™ and Wiegand

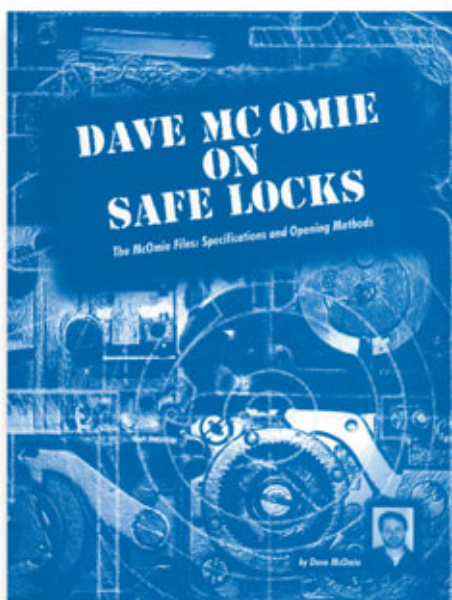


**18. Other information like notes, unlock and access schedules can be viewed or edited.**



**19. The history report can be viewed and saved after it is uploaded from the controller to the computer.**

# Dave McOmie on Safe Locks



Almost 300 pages of information, photographs and illustrations give you every scrap of information about a huge variety of safe locks.

**CLICK HERE TO LEARN MORE**

#DMSL - 1

- Warranty: one year (Cansec manufactured parts)
- Card/Key Warranty:
- iButton™ \* lifetime, normal wear
- Proximity/Wiegand varies by manufacturer
- Communications: RS-485, single pair, stranded, twisted overall shield, 18-20 AWG, 2000 ft. max.
- Lock Output:
- iButton™ open collector, 12VDC @ 250 mA supplied
- Proximity \* some readers may require 12 VDC supply
- Door Operator Output: dry contact, normally open, 250 mA @ 24VDC
- Handicap Button Input: normally open, momentary closure
- Exit Button Input: normally open, momentary closure
- Door Contact Input: normally closed
- Bi-Color LED: standard
- Beeper: standard
- Operating Temp: -40C to 70C (-40F to 158F)
- Environment: Indoor/Outdoor
- Supply Voltage: 12VAC, 20VA or 12VDC, 1A (depends on lock and readers used)
- Software features:
- Operating System: Windows™ 95/98/ME/NT/2000
- Controller Capacity: 30 single reader controllers
- Cardholder Capacity: 4800
- Access Schedules: 6 User Programmable
- Unlock Schedules: 60 User Programmable
- Timed Anti-Passback: 1 to 255 minutes
- Holidays: 60
- Commands: Unlock, Momentary Unlock, Upload, Download

I hope you enjoyed this inside look at the SmartLock online access control system from Cansec. See you next time and have a nice day!

*For more information about this system or one of their many others, contact: Cansec Systems Ltd. 3105 Unity Drive, Unit #9, Mississauga, Ontario, Canada, L5L 4L2. Phone: (905) 820-2404; Fax: (905) 820-0301. Web: <http://www.cansec.com>.*

**TNL**

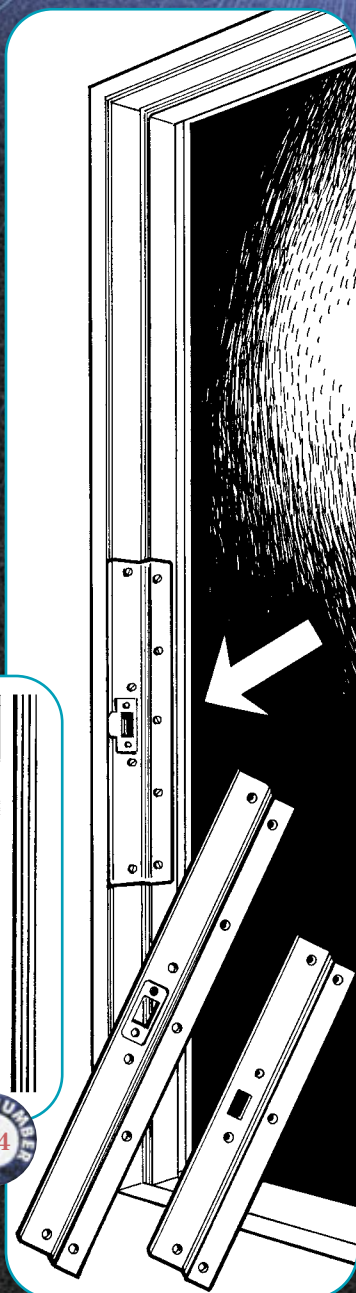
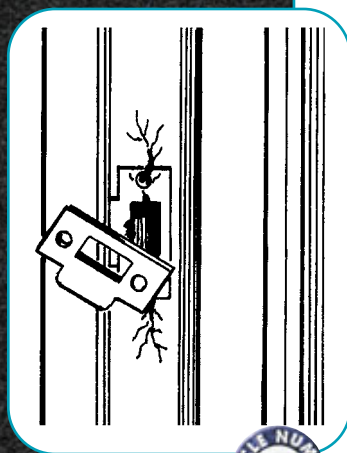
# Door HARDWARE

## MAJOR JAMB JACKET

Imagine if you will, trying to play a baseball game without bats, or perhaps fishing without a lure or hook. Seems silly, doesn't it? It's like the expression: "The sum is the whole of its parts." Quite simply, certain activities rely on specific equipment. The same holds true for installing security devices in a doorway. The counterpart to any good door-locking mechanism is the jamb of the door itself. It's a simple component to a door that is often

overlooked. Customers spend a lot of money to have state-of-the-art locks installed on their doors, but if the integrity of that jamb is compromised, then that lock becomes nothing more than an expensive ornament, because there's nothing to stand in between the intruders and the valuable items on the other side of that door.

Whether the doorjamb has been damaged by an attempted break-in, or just simply due to someone's carelessness with heavy equipment crashing into the frame, Major Manufacturing's Jamb Jacket truly is the minimal cost solution. The Jamb-Jacket installs within minutes and gives a professional look to any job. And they're cost-effective too. Keep a few on hand in the service vehicle for any time an emergency situation arises and your customer needs a repair done in a hurry. The Jamb Jacket is the perfect and swift answer for repairing and reinforcing any doorjamb, be it damaged or not. Jamb Jackets not only save from the expense of having to replace an entire doorjamb that has been damaged, but it also aids in the strengthening and reinforcement of an undamaged jamb as well.



## SARGENT INTEGRATION

A question every business owner should be asking himself or herself: "What is at risk? Property? Business Strategy? Computer software/data? Employee safety?" Each of these is a good reason for access control within a business.

At SARGENT, we are serious about "Leading the Trend toward Higher Security." SARGENT has introduced their third generation of stand-



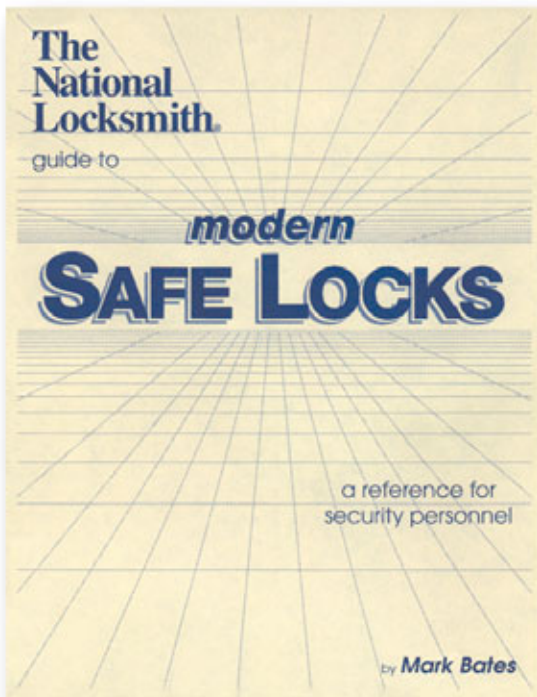
alone access-control locks, using keypad/computer technology to determine authorized access. SARGENT makes an important leap in access-control by combining HID proximity-card technology with SARGENT'S keypad lock technology and Softlink Plus Software. This allows the business owner to integrate prox-technology without hardwiring an electric lock or strike.

The SARGENT prox-lock can operate as prox only, or also requiring a pin code to be entered on the keypad, increasing the level of security. Using prox-cards or a "fob" allows for easy integration into a business owner's existing HID prox-system, or provides a great platform for a new system. The lock allows up to 500 users and stores the last 1,000 operations in memory. When interrogated, it can provide detailed information of these operations. Each lock contains a "real time" clock with the date, allowing for eight different time zones, 16 different holidays, and sustained mode capability.

Programming is accomplished using Softlink Plus and a computer or a hand-held data transfer unit. All of this is in the new "Low Profile" design that is stylish and versatile (covers existing preps). As a "full line" manufacturer of finish hardware, SARGENT offers this technology in a heavy-duty cylindrical lock, mortise lock and rim/mortise panic devices.

#### SECURITY DOOR CONTROLS EMLOCK®

SDC manufactures a complete line of premium grade Emlock's to meet a variety of access control



## Modern Safe Locks

You always wanted to make money servicing safes?

[CLICK HERE TO LEARN MORE](#)



installation requirements. Choice of holding force includes: 1650 lbs., ANSI Grade 1; 1200 lbs., ANSI Grade 2; and 650 lbs., ANSI Grade 3. A small 300 lb. magnet is available for drawers, display cases and cabinets.

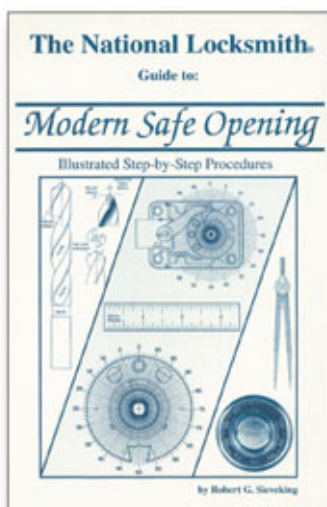
The electromagnetic core utilizes an advanced patented metal fusion “U” channel design, which fully stabilizes the EmLock mechanically and magnetically. The need for unsightly black epoxy is not required, providing a superior aesthetic appearance and eliminating the potential for toxic fumes in a fire. Furthermore, all EmLocks are completely serviceable and all parts are interchangeable without removing the lock from the frame.

The 1511 series “Quick Mount” assembly consists of an interlocking mounting plate, providing positive attachment of the lock prior to fastening. Both hands are free for securing screws and attaching wires. In addition, the interlocking feature distributes stress evenly the full length of the lock and reduces stress to the lock mounting screws. Mounting integrity is significantly increased.

The patented Micro/Shear and Hi/Shear design features provide the most reliable operation available in a shear lock. SDC electromagnetic shear locks are capable of both vertical and horizontal alignment adjustment. They are equipped with a door alignment and door static sensor with a relock delay timer, preventing activation of the lock until the door is at rest and properly aligned with the lock. The Micro/Shear EmLock can withstand up to 2000 lbs. holding force and the Hi/Shear EmLock is capable of up to 2700 lbs. holding force.

SDC Emlocks are UL Listed as “Auxiliary Locks” and “Burglary Resistant Electric Locking Mechanisms,”

## Modern Safe Opening



This book is a step-by-step How-To course in safe penetration. Opening safes is one of the most profitable aspects of the locksmithing business.

CLICK HERE TO LEARN MORE

#MSO - 1



CSFM Listed, MEA Listed. SDC EmLocks comply with “positive pressure” requirements of UL10C and are classified in accordance with UBC standard 7-2, “Fire Test for Door Assemblies.” SDC Emlocks are also BHMA certified as meeting ANSI/BHMA Grade 1, Grade 2 and Grade 3 holding force requirements accordingly.

### STI EXIT STOPPER

The STI Exit Stopper® from Safety Technology International, Inc. of Waterford, Michigan. STI is best known for its Stopper® II unit that has been helping stop false fire alarms around the world for more than two decades.

Completely self-contained, Exit Stopper can be mounted on top, right, left or next to almost any door. When opened, the device sounds a 120 dB warning horn (or softer 85 dB) for 30 seconds, three minutes of continuously (as preset by the user). A key-operated override will silence the alarm and permit authorized exits.

Available in red or green, Exit Stopper has found wide favor in stores, restaurants and such who are required by law to keep their side or back doors open during normal business hours. It's easy to install, much less expensive than heavy bar-type units and offers a wide range of useful features. For example, there can be remote placement of the alarm or it may be programmed for a 15-second entry delay.

Another feature customers seem to appreciate is the stop sign design and the large printed words “STOP...EMERGENCY EXIT ONLY” which serve as a deterrent itself. Also, the user can select on site whether to use the device as an alarm or to announce entrances. In the annunciator mode, it announces a door entry with a set of five beeps.

At the request of customers, each device features a low battery warning indicator to protect the long-life alkaline battery that comes with each unit. A separate model is available for protection of double doors.

Applications for the STI Exit Stopper are as wide as there are customers who have emergency, fire or other doors to protect—including special schools. **TNL**

# Continuous Geared Hinges

by Bob Cronk

**D**o you hear an “Opportunity for Profits,” when callers say:

*“Can you come over and fix our doors? The locks won’t work, and the hinges are letting our doors sag and drag on the thresholds”.*

Medium and high-traffic doors often show wear because the frequent usage and stresses are more than many traditional hinges can handle. A sagging door condition is most commonly caused when the top butt hinge or pivot has started to pull out from the frame. One way to remedy this condition is to install a full-length continuous geared hinge that distributes the door weight and stresses over the full length of the door and frame. The door can usually be salvaged, and the locksmith becomes a hero to the customer. Best of all, this is a *Profit Opportunity* for the savvy locksmith!

Continuous geared hinges are utilized as a hinging system for aluminum, wood, and hollow metal door and frame applications for retrofit and for new construction. This commercial architectural hardware product is being specified more and more for medium-to-high traffic interior and exterior doors. Continuous geared hinges are well suited to keeping entrance components in alignment while withstanding the pressure of many thousands of cycles per year, and in some cases, even thousands per day! High winds also take their toll of door hardware systems.

The continuous geared hinge provides clean, eye-appealing design lines and can be anodized or custom painted to match nearly any exterior design.

Constructed of three interlocking, anodized extrusions (two geared leaves and a cover channel), a continuous geared hinge installs on the full length of the door and frame, uniformly distributing the opening and closing force of the door. The

vertical door loads are carried on a series of either high-tech plastic or steel bearings along the full length of the hinge. Continuous geared hinges can be manufactured in light duty, standard duty, heavy duty, or extra heavy duty versions. The heavy and extra-heavy duty models have additional bearings and fasteners to support added door weight, extra-wide doors, lead-lined doors, or any doorway having unusually frequent traffic.

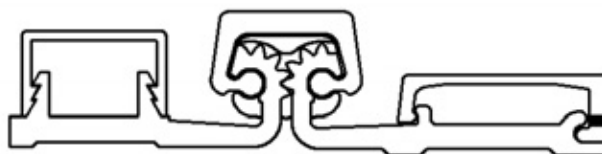
This full-length design seals the gap between door and frame, offering security, privacy, noise reduction, weatherproofing, and no-finger-pinching features. Continuous geared hinges also reduce or eliminate the recurring problem of wind damage caused to doors by attempts at closing the door while a broomstick or other foreign object has been wedged into the gap between door and frame. The disbursement of opening force along the length of the door also greatly reduces the amount of stress on a door caused by misaligned butt hinges or pivots, which by their nature localize door weight and stress at the upper portion of the door. Most importantly, continuous geared hinges serve to reduce or eliminate door sag.

Continuous geared hinges are installed on the surface of the door and frame. No costly mortising or cutouts are required on either the door or the frame. When the door is closed, most profiles have no exposed screws, bolts, pins or knuckles to be vandalized.

There are three main applications for continuous geared hinges:

## Full Surface Mounting

Full surface continuous geared hinges are installed on the face of a door and frame. This profile is usually used in retrofit situations, but can also be used with new doors and frames. (*See illustration*



Full Surface Hinge

**Illustration A.**

A.) The hinge is installed with 12-24 fasteners in the frame leaf, and fastened with throughbolts and 1/4-20 shoulder screws through the door.

Full surface hinges are also usually designed with four locator holes per hinge to aid in the adjustment of the door to fit plumb and square in the entrance opening before installation of the door and frame fasteners. This profile can be used on aluminum, wood and hollow metal doors up to 2-1/4-inch thick. A common use for full surface hinges is on doors that have sagged due to damage or wear on the original butt hinge or pivot.

#### Half-Surface Mounting

Half-surface continuous geared hinges are installed on the face of a door, with the frame leaf concealed. This profile is usually used in retrofit situations, but can also be used with new doors and frames. (See illustration B.) The new door must be undersized by the clearance needed at the lock side of the door, plus 3/16-inch (1/8-inch frame leaf + 1/16-inch clearance = 3/16-inch) on the hinge side. The frame leaf is installed on the rabbet of the frame with 12-24 fasteners, and the door leaf is through-bolted to the door surface with sexnuts and 1/4-20 shoulder screws. This profile can be used on aluminum, wood and hollow metal doors up to 2-1/4-inch thick. A common use for half-surface hinges is on doors that have been weakened at the hinge edge, but the door itself is still serviceable.

#### Concealed Mounting

Instead of being "mortised", the concealed type of continuous geared hinge is simply mounted on the

hinge stile of the door and on the rabbet of the frame. This profile is normally specified for use in new construction, but can also be used with new doors in existing frames. (See illustration C.)

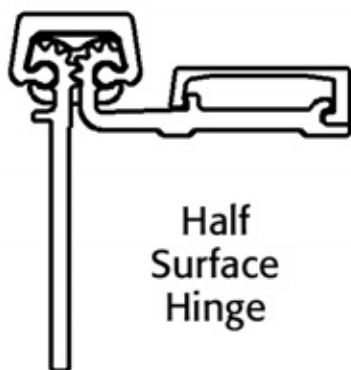
A new square-edge door must be undersized by the amount of clearance needed at the lock side, plus 5/16-inch for the hinge (1/8-inch leaf + 1/8-inch leaf + 1/16-inch clearance between leaves = 5/16-inch).

A new bevel-edge door must be undersized by the amount of



Concealed Hinge

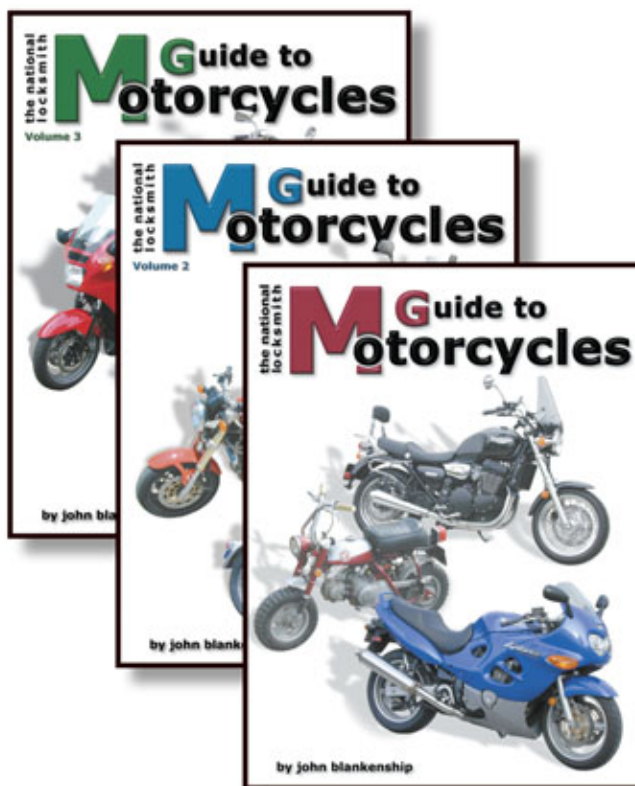
Illustration C.



Half Surface Hinge

Illustration B.

## Guide to Motorcycles Volumes 1, 2, 3



For years locksmiths have begged for a comprehensive service manual on motorcycles and its finally here!

[CLICK HERE TO LEARN MORE](#)



clearance needed at the lock side, plus 11/32-inch for the hinge (1/8-inch leaf + 1/8-inch leaf + 3/32-inch clearance between leaves = 11/32-inch).

The hinge cap on the profile requires a 7/16-inch rotational clearance at the jamb side. The hinge opens to a full 180 degrees, and is usually designed for either 1-3/4-inch or 2-inch doors. The concealed hinge is engineered to work with a closer having a butt hinge type pivot point. Existing concealed floor or concealed overhead closers having a fixed center pivot point must be replaced with a traditional overhead surface closer.

Concealed continuous geared hinges are normally installed with either 10-24 or 12-24 undercut head, thread-forming fasteners. A pilot hole needs to be drilled, and the fastener then forms its own threads. Some installers use self-drilling fasteners, but they are not recommended for installation in mortar or grout-filled door frames. The drill point in all probability will hit the mortar and create a "jacking effect" on the frame. It is

recommended to first remove the mortar with a masonry bit. If possible with contract work, some form of mortar guard should be specified behind slushed-in frames. Security fasteners, wood screws and other fasteners are also available for certain applications.


### Evolution

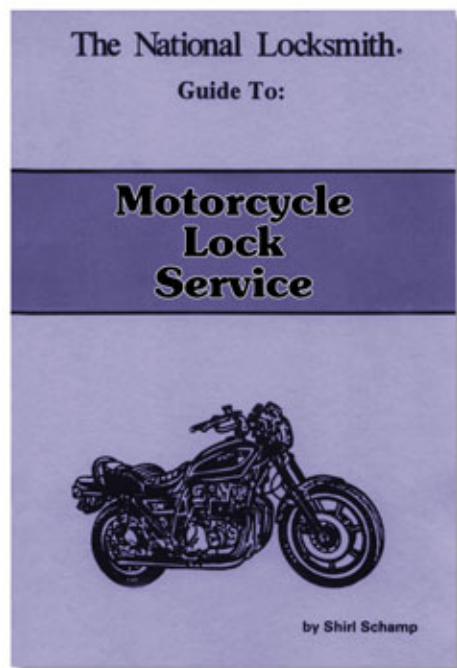
Like many product lines, design improvements have taken place since the concept of continuous geared hinges was first introduced over 25 years ago. Modern continuous geared hinges have templated hole patterns, lubricated bearings, permanent lubricants on the geared areas (which nearly eliminates maintenance needs), extended wear life, non-handed design, 410 stainless steel fasteners, security features, electrical modifications, and decorative hinge caps.

Continuous geared hinges are manufactured in standard industry lengths (79, 83, 85, 95 and 119-inches) that allow for threshold clearance in most openings. Mounted flush with the top of the door and allowing 1/8-inch header

clearance, standard length hinges allow 7/8-inch clearances at the bottom. Hinges can be cut to exact lengths in the field, or at the factory. After cutting, a non-handed new continuous hinge may become handed, depending on the model. Most hinges are finished in 628 Clear anodized aluminum, or Dark Bronze anodized colors. Custom anodizing and custom painting allow the hinges to be matched with other hardware finishes.

A properly installed continuous geared hinge can easily last ten to twenty years or longer in an entrance, and tolerate a great deal of abuse and heavy traffic with little or no maintenance required. Schools, hospitals, public buildings, hotels, airports, sports centers, storefronts and wastewater treatment plants are just a few of the many commercial, governmental and industrial facilities that are specifying continuous geared hinges because they extend the life of the entrance system.

*Bob Cronk is national sales manager for SELECT Products Limited in Portage, MI. *



## Motorcycle Lock Service

This book contains full details on everything the locksmith needs to know about motorcycle locks.

CLICK HERE TO LEARN MORE

#MLS-1

1970

PART TWO  
BY  
MICHAEL  
HYDE



# MERCEDES-BENZ

250

This month we conclude with the trunk lock, glove box lock and specifications.

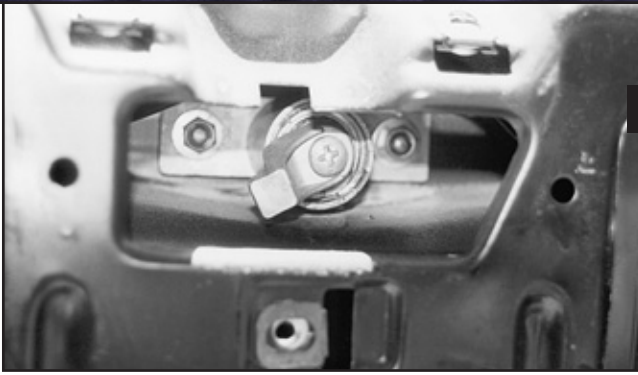
## Trunk Lock



1. The trunk lock is located on the rear body above the license plate. The lock cylinder is mounted in a push button body design.



2. To gain access to the trunk lock you will need to remove the latch mechanism. There are three large Phillips head bolts that must be removed.

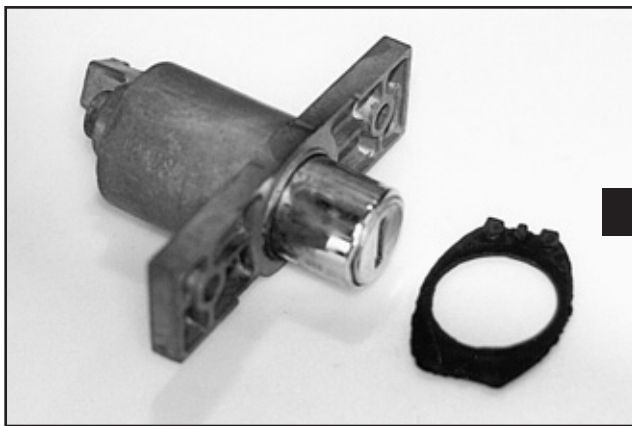


Keep an eye on the chrome trim as you remove the nuts that secure the lock cylinder. It could fall off and get scratched.

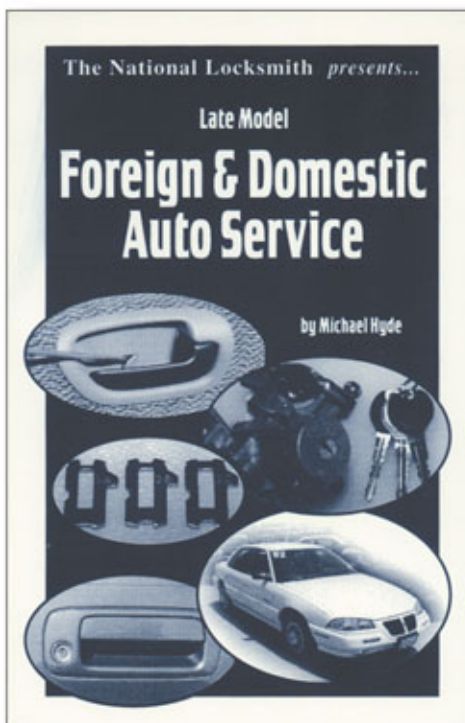
3. Once you have removed the latch, you can then see the rear of the lock cylinder. Remove the two 10mm nuts securing the lock cylinder.



4.



5. Here is the lock cylinder removed. There is a rubber gasket that can easily be lost when removing the cylinder.

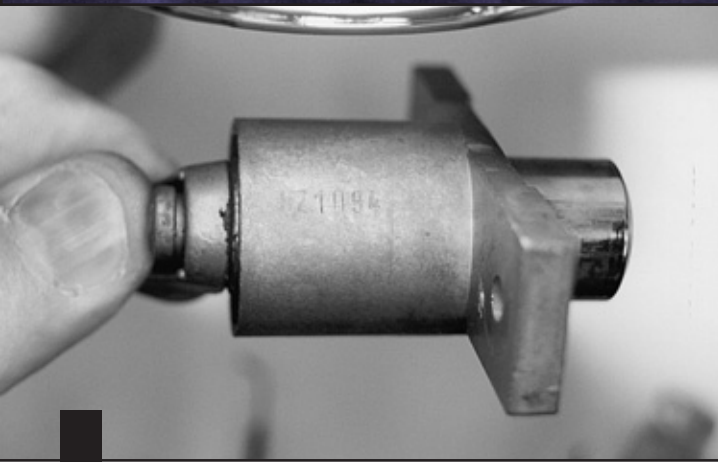


## Foreign & Domestic Auto Service

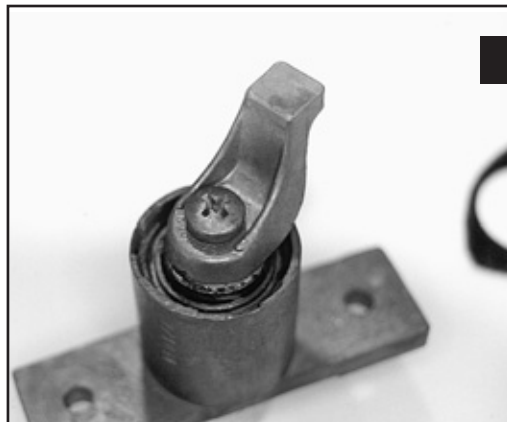
This book represents the best work of Automotive Locksmithing guru Michael Hyde, author of the famous AutoSmart.

[CLICK HERE TO LEARN MORE](#)





**6.** There is a code stamped on the side of the trunk lock housing. The code series for this car is HZ 001-HZ 1200.



**7.** To disassemble the trunk lock you must first remove the Phillips head bolt that holds on the tailpiece.



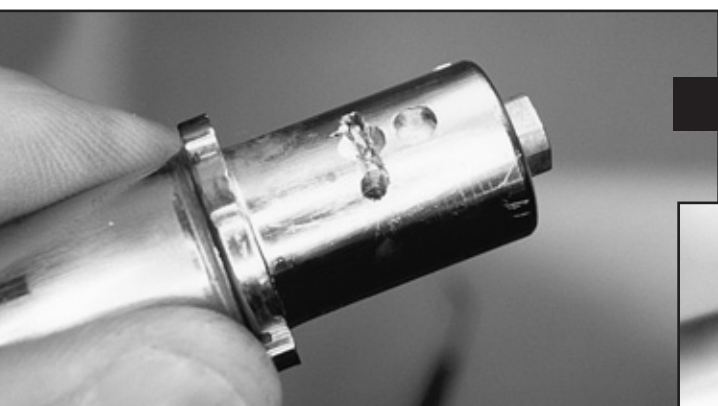
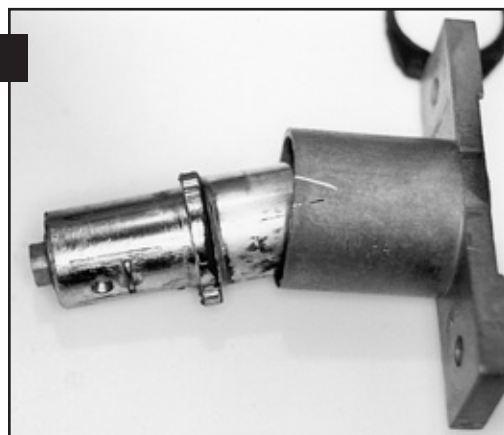
**8.** The trunk lock cylinder is housed in the push-button assembly. There is a retainer ring holding the cylinder in the housing.



**9.** Use a small flat bladed screwdriver to wedge out the retainer ring. The body spring and spring washer will then come out.

**10.**

The trunk lock cylinder will then be able to slide out of the push button housing.



**11.** The lock cylinder has a ward in it. You will need to remove the ward keeper. Drill a small hole directly next to the ward keeper and pry it out.

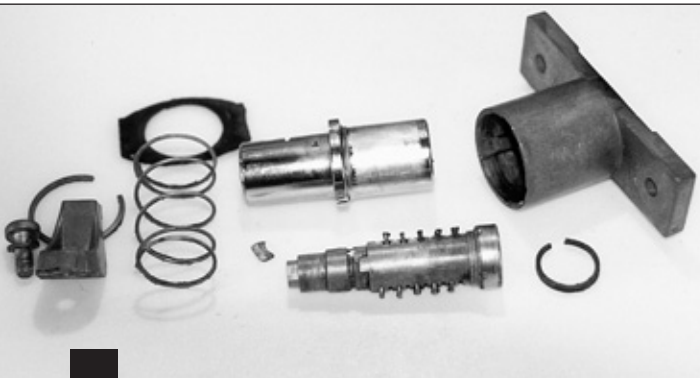




12. The lock cylinder plug will now slide out the front of the cylinder housing.



13. The trunk lock cylinder plug contains 10-tumblers and they are bi-directional.



14. Here is a view of the trunk lock cylinder assembly.

### Glove Box Lock



15. The glove box lock is located to the left of the glove box handle.

## NLAA One Year Membership

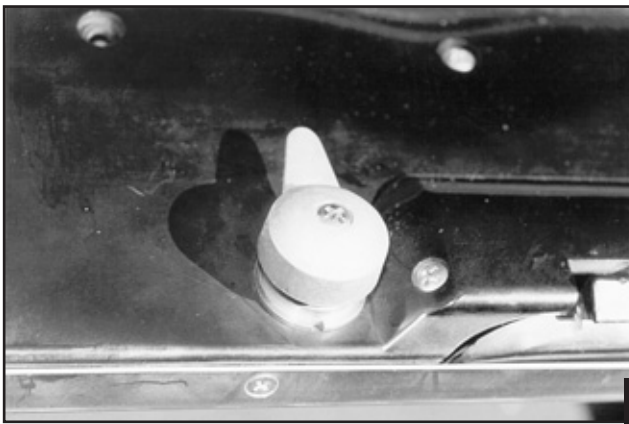


The big problem in automotive locksmithing is the tremendous amount of information you need to have at your fingertips.

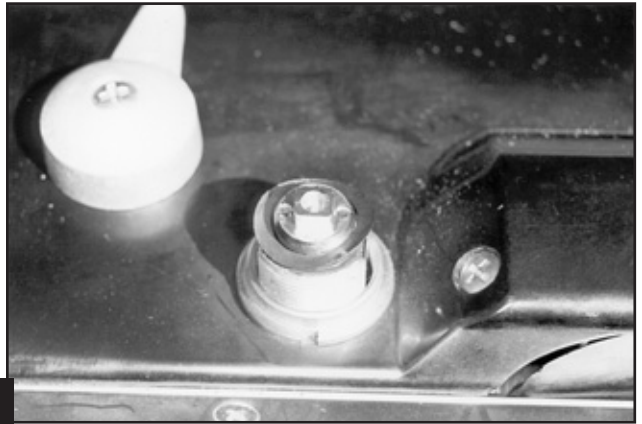
Free when  
you join NLAA

CLICK HERE TO LEARN MORE





16.



To remove the glove box cylinder, the tailpiece needs to be removed.  
Once removed, save the spring washer underneath.



17. There is a code stamped on the side of the glove box lock housing. The code series for this car is HZ 001-HZ 1200.



18. On the back of the lock there is a retainer ring holding the cylinder in the housing, use a small flat bladed screwdriver to wedge out the retainer ring.

*Continued on page 42*

## NSO One Year Membership



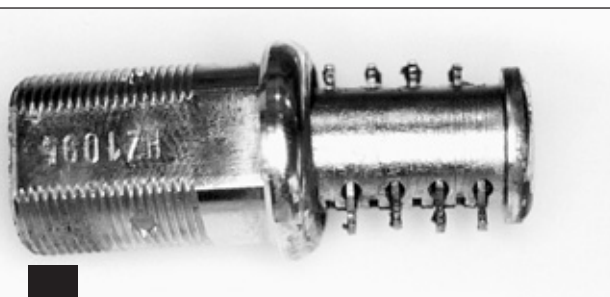
Free when  
you join NSO

To make big profits  
in safe work with no  
hassles...you need  
information!

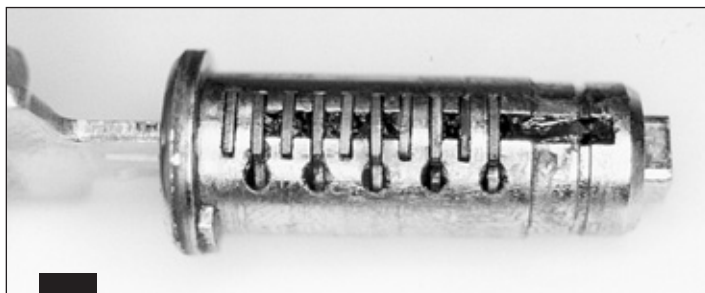
[CLICK HERE TO LEARN MORE](#)



Continued from page 39

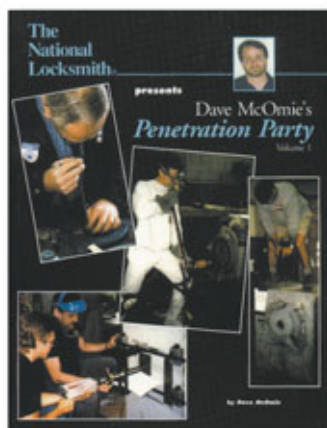


19. The plug can now slide out the front.



20. The glove box lock cylinder plug contains 10-tumblers and they are bi-directional.

## Penetration Party



- Uncensored!
- The Safes!
- The Tools!
- The Action!
- The Perfect Openings!
- The Bloopers & Blunders!
- The Slick Tricks!

CLICK HERE TO LEARN MORE

#PP - 1

## Making First Key

### Method #1

Check owner's manual for code, written in by the dealer.

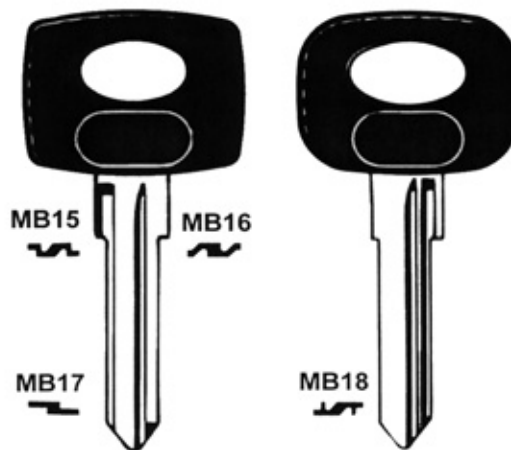
### Method #2

Remove the glove box lock and read the code on the side of the lock and make a master key from that.

### Method #3

Remove the screw on the edge of the door that holds the door handle/lock cylinder in place. Push the handle assemble towards the front of the car and then remove it.

There should be a code stamped on the door handle, if there is no code then disassemble the lock and decode the available wafers and make a working key. Some door cylinders are missing tumblers in positions 1 & 2. If there are missing cuts, then progression or impression the missing cuts in the trunk or ignition. There are special tumblers in the trunk, to block out the valet, make sure you're using the correct blank to the car you are working on. Otherwise you will have a key that works the doors and ignition, but for some reason it doesn't work the trunk.



### CODE SERIES: HZ/NZ 1-1200

#### DEPTHS

- 1 = .284
- 2 = .264
- 3 = .244
- 4 = .224

Cut to Cut: .090

#### SPACING

- 1 = .105 (bow)
- 2 = .195
- 3 = .285
- 4 = .375
- 5 = .465
- 6 = .555
- 7 = .645
- 8 = .735
- 9 = .825
- 10 = .915
- 11 = - (tip)

#### Key Blanks:

ILCO: M79T, MB15 SILCA:  
HU22  
Jet: MB16-NP

#### Reed Codes:

5-02-188, 5-02-201

#### HPC 1200 CM:

CF30, XF30

#### Curtis Clipper:

N/A

#### ITL MFG:

303

#### Pak-A-Punch:

N/A

#### M.A.C.S.:

2

# Quick Entry

## UPDATE

by  
Steve  
Young



TECH TRAIN PRODUCTIONS

### 2002 CHEVROLET AVALANCHE & CADILLAC ESCALADE EXT

The 2002 Chevrolet Avalanche and Cadillac Escalade EXT are being advertised as a completely new kind of vehicle. (See photograph 1.) By the use of several clever sliding panels and fold-down seats, they can be converted from a pick-up truck to an SUV in a matter of seconds. However, one thing about these trucks is not new - the door. The doors on both the Avalanche and the Escalade EXT are virtually identical to those found on all of the other GM Sport Utility Vehicles made after 2000, and pick-up trucks made from 1999 and up. The same unlocking methods that work on the Avalanche will also work on the Chevrolet Tahoe, Suburban and Silverado, GMC Denali, Yukon, Yukon XL, and Sierra as well as the 2002 Cadillac Escalade SUV.

These vehicles use a new version of the GM "CSS" steering column that first appeared in 2001. (See photograph 2.) This column is much easier to deal with than the earlier versions because both the upper and lower portions of the shroud can be removed without having to remove the lock plug. The joint between the upper and lower portions of the shroud runs through the centerline of the lock plug. After the shroud has been removed, you will have complete access to the lock assembly.

Despite the fact that the shroud can be removed easily, it is important that you be careful as you remove the upper portion of the shroud. The red plastic hazard-warning switch that extends through the upper portion of the shroud is relatively fragile. I have



1. 2002  
Chevrolet  
Avalanche.



2. The Avalanche and the Escalade EXT use a new "CSS" steering column.



3. Use the short end of the TT-1008 tool to unlock the truck.



4. Carefully insert the short end of the tool into the door.



5. Lever the linkage rod toward the front of the truck to unlock it.

spoken with several locksmiths who have accidentally broken this switch. If you break the hazard-warning switch, you will have to replace the entire ignition switch. The ignition switch is not cheap, but even worse it will require a lot of labor to replace it.

When you unlock one of these vehicles, the first thing that you will notice is the way that the weather-stripping fits at the base of the window. On older model trucks and SUVs, the inside weather-stripping has been attached to the top of the upholstered door panel. This made those trucks relatively easy to open with an "under the window" tool. On the new trucks and SUVs, the weather-stripping is very firmly attached to the top of the door itself. This arrangement makes for a very tight fit between the window glass and the weather-stripping. Because of the tight fit, I was unable to use any of the "under the window" style tools to unlock these vehicles. In addition, the very tight fit between the window and the weather-stripping makes it very difficult to see into the door cavity with an inspection light. Fortunately, an inspection light is not needed to unlock these vehicles.

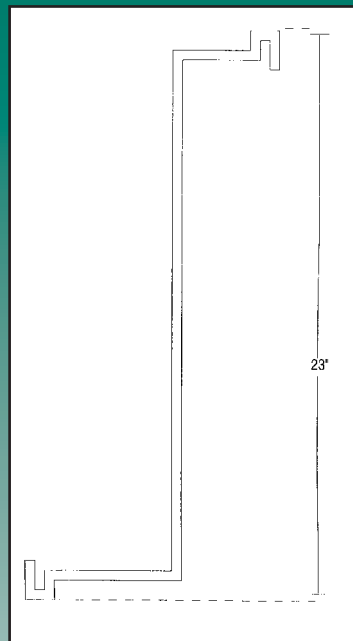
The door lock is mounted into an oversized modular outside door handle that is similar to the one used on the Chevrolet Venture, Oldsmobile Silhouette and Pontiac Montana minivans. The doors use plate-tumbler locks that are very similar to Chrysler door locks. These locks have seven wafer-style tumblers, three on one side of the keyway and four on the other. This makes it possible to pick these vehicles open with conventional lock picks or rocker-style picks. The direction to pick the passenger side door lock is counter-clockwise to unlock the door, clockwise on the driver's side.

To unlock the truck with the Tech-Train 1008 tool, begin by wedging open the weather-stripping at the base of the window. (See *photograph 3*.) Insert your wedge about three to four inches from the back of the window. Because of the tight fit of the window, you will only be able to open a small gap into the door cavity that is barely large enough to allow insertion of the tool.

Carefully insert the short end of the TT-1008 tool (see *illustration A*) into the door and lower it until the top end of the tool is about five inches above the weather-stripping. (See *photograph 4*.) Make sure that the shaft of the tool is vertical and no more than an inch forward from the back of the window

#### Quick Reference Guide

<b>Vehicle:</b> 2002 Chevrolet Avalanche and Cadillac Escalade EXT <b>Direction of Turn            (passenger            side):</b> Counter-Clockwise <b>Tool:</b> TT-1008 (short end) <b>Lock System:</b> 10-Cut GM, Sidebar Ignition and Plate-Tumbler (wafer) Style Door Locks. <b>Security System:</b> PassLock I (MRD)	<b>Lock            Manufacturer:</b> Strattec <b>Code Series:</b> S000A - S711K <b>Key Blank:</b> Strattec 598007 (Chevy Logo) or 599478 (Cadillac Logo); Ilco P1113; Ilco EZ B102; Jet B102-PHT; Curtis B102. <b>Bitting:</b> Ignition 1 - 9; Doors 3 - 9; Tailgate 4 - 10; Spare Tire and Toolbox 6 - 10.
--	--



**A. The TT-1008 tool.**

**6. With the door panel removed, the linkage rod is shown.**

glass. Rotate the tool so that the end that is inside the door is pointed toward the inside of the truck. Pull up slowly until you feel the tool hook onto the lower linkage rod. Twist the tool to bind the linkage, then lever the linkage rod forward to unlock the truck. (See *photograph 5*.) If you fail to hook onto the linkage rod, bend the shaft of the tool slightly so that the tool will reach further toward the inside of the door and try again.

*Photograph 6*, shows the door with the door panel removed. The inside lock control linkage rod, indicated by the blue arrow, is the lower of the two horizontal linkage rods that are attached to the latch. The two linkage rods cross over each other very close to the latch, which is why the linkage rod indicated in the photograph is the upper of the two rods. The inside lock control linkage also runs closer to the outside of the door than the handle linkage, which makes it easy to locate by feel. There are two 90° bends in the lock control linkage rod just forward of the latch that allow the tool to grip the linkage rod very easily. The short end of the Tech-Train 1008 tool can be used to grasp the inside lock control linkage and move it forward to unlock the truck. The point

where the tool contacts the linkage rod is just slightly less than 15" deep in the door.

Unfortunately, there is also a wire bundle, shown by the black arrow in *photograph 6*, located very near the linkage rod. It would be very easy to get the end of the tool hooked onto these wires if you are not careful. Use caution as you probe for the linkage rod. When the tool contacts the linkage rod it will have a very solid feel. But, if you accidentally hook onto the wire bundle, the movement of the tool will feel "mushy."

All of these vehicles have a very substantial frame around the window, so it can also be unlocked with the Jiffy-Jak Vehicle Entry System. To use the Jiffy-Jak, it will be necessary to attack the door from a very high angle at the upper corner of the door. When placing the lever, be sure to support the tool properly with the base-plate and apply pressure at a point that is several inches below the actual corner of the door.

For more information on the Jiffy-Jak Vehicle Entry System, or any other Tech-Train tool, visit [www.techtrainproductions.com](http://www.techtrainproductions.com) on the Internet.



# Everest Primus Debuts



**Part Two  
by Sal  
Dulcamaro**

Last month we covered the design and functional differences between the Schlage conventional lock cylinders and the Schlage Primus, and also introduced the new Everest product line. This month we conclude with the design and function of the Everest Primus.

## Where did the Check Pin Go?

*Photograph 1*, shows an Everest Primus plug on the bottom and a standard Everest plug on top. Normally the check pin will drop into the hole in the shell if the lip of the undercut groove isn't there to pick it up and release the plug. The Everest Primus keys also have an undercut groove, but in the Everest Primus plug there are side cuts to operate finger pins. The fifth (last) position finger pin is located where a check pin would be located. That pin is set up to lock or unlock the sidebar, rather than to descend and protrude through the shell. *Figure A*, illustrates the operation of the check pin with either



**1. An Everest Primus plug on the bottom and a standard Everest plug on top.**

an Everest key or Everest Primus key lifting it. This is where things change for Everest Primus compared to Classic Primus.

In Classic Primus, a standard Schlage key would not operate the high security cylinder because the keyway broaching was slightly different and the conventional key would not even enter the keyway. The Everest key can enter the Everest Primus keyway, but is rendered inoperable because of the milled away center section where the side milled cuts would be. I mentioned earlier that I would return to the subject of finger pins. First, look back at *photograph 3*. If you didn't notice the first time, observe that they are numbered up to the number 6, but there were only five sizes of pins in the kit. There is no #5 finger pin, or at least there was no #5 finger pin when Classic Primus was introduced.

Primus finger pins are numbered, but they each represent both a depth and an angle that must be generated in order for the narrow spot of the finger pin to fit into the mating slot within the sidebar. The angle

position can be left, center or right. The depth can be either shallow or deep. The combination of the angle and depth can be translated into a specifically numbered finger pin. Let's see how it works.

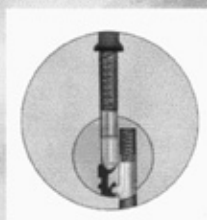
## Finger Pins and Side Cuts

*Figure B*, shows the physical profile of finger pins, in side and back view. The new style was introduced in 1998 and is not unique to Everest Primus. Classic Primus manufactured after then should have new style finger pins. Except for the minor physical difference, the finger pins can be read (decoded) the same way. If you have a pair of tweezers with small enough tips, *figure C* shows how you can grasp a finger pin by the web (narrow spot that fits into the sidebar slot) and hold it in front of you to decode the tumbler angle. With the hollow end of the finger pin up, *figure D* shows what each angle should look like. After you determine the angle you will need to determine whether the finger pin is for shallow or deep.

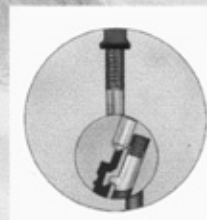
The web height on a finger pin will vary slightly between either a left or right angle compared to a center angle for both shallow and deep. *Figure E*, shows the side and back views of left or right angle finger pins. Obviously the angle will differ between a left and right pin, but the height of the web will be the same for left shallow and right shallow as it is for left deep and right deep. For shallow positions: 1 is left and 5 is right. For the deep positions: 2 is left and 6 is right. The web for center pins is positioned slightly lower for both

## Where did the check pin go?

- The check pin is used in Everest conventional cylinders to "check" for the lip from the undercut groove. In Everest Primus, the finger pins do the checking.



**Locked**

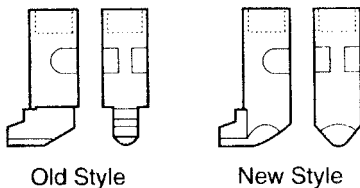


**Unlocked**

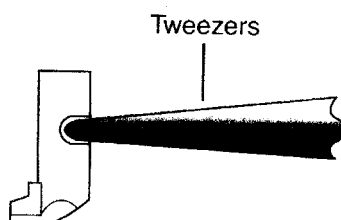
**A. The operation of the check pin.**

shallow (3) and deep (4), compared to either left or right angle (see figure F).

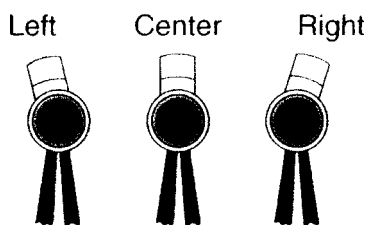
Figure G, shows the relative web height for all the different finger pins compared to the others. Remember that where two different identifying tumbler numbers are indicated, one is a left angle and the other is a right angle. If you ever spill a Primus finger pin service kit, you will probably be glad you know how to decipher the



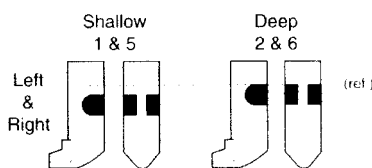
**B. The physical profile of finger pins.**



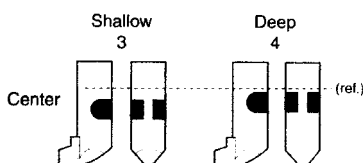
**C. Shows how you can grasp a finger pin.**



**D. What each angle should look like.**



**E. Left or right angle finger pins.**



**F. The web for center pins is positioned slightly lower for both shallow and deep.**

tumblers. To convert angle and depth into actual finger pin tumbler numbers, you can use the following chart.

	Left	Center	Right
Shallow	1	3	5
Deep	2	4	6

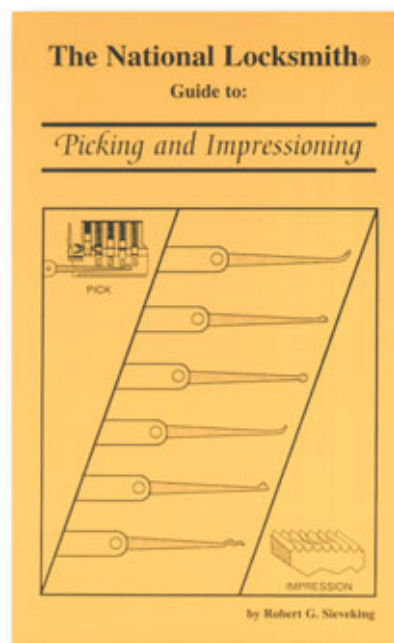
### Milled Side Cut Spacing

I mentioned earlier that the five milled side cuts (for the finger pins) are found in between the six conventional key cuts. The actual pin chambers are exactly in the middle of the corresponding conventional pin chambers. If a side cut happens to be

for a center angle finger pin, the actual cut will be centered between the conventional cut before and after it. If the milled side cut is for a left or right angle finger pin, it will be slightly shifted off center to the left or right. In figure H, the arrows on top point to the centers of the conventional pin chambers and actual key cuts. The arrows on the bottom (pointing upward) indicate the centers of the finger pin chambers. The six possible cut positions in each space are shown but are quite small and faint. Figure I, shows a section of the key enlarged to

**Continued on page 52**

# Picking & Impressioning

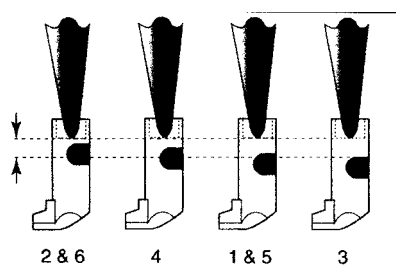


Here is the most complete book ever published on picking and impressioning locks! You will have everything you need to know about how to open almost every kind of lock that can be picked.

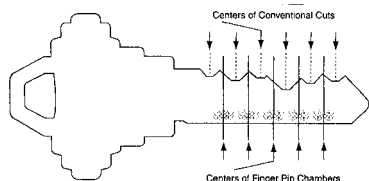
**CLICK HERE TO LEARN MORE**

#PI

Continued from page 49

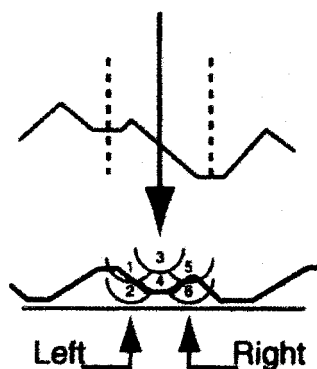


**G. The relative web height for all the different finger pins.**

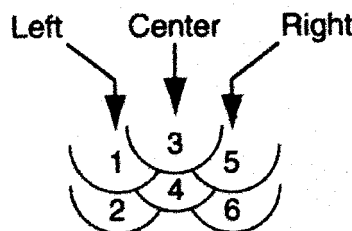


**H. The centers of the conventional pin chambers and actual key cuts.**

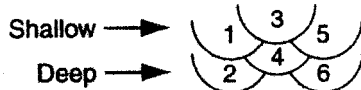
### Centered Between Conventional Cut Roots



**I. A section of the key enlarged to better illustrate those cut variations.**



**J. The left, center and right angle cut variations are labeled by corresponding finger pin numbers.**



**K. Shallow and deep cut positions are similarly labeled.**

better illustrate those cut variations. The left, center and right angle cut variations are labeled by corresponding finger pin numbers, in figure J. Shallow and deep cut positions are similarly labeled in figure K.

Since the side millings on a Primus key are always precut at the factory, there is no need to know depth and spacing for key cutting purposes. The value of being able to decipher Primus side cuts is to provide you with information to code the lock with the correct finger pins.

Why the sudden introduction of the #5 finger pin? I think that is fairly obvious. If you recall, an Everest cylinder requires a raised surface toward the tip of the Everest key to lift the check pin. With the integration of Everest Primus, any side milling cut combination can be made to work as long as the finger pins match the cuts. Where the complication occurs is that Everest Primus keys are supposed to be able to operate standard Everest cylinders, too. That means that in the fifth (most forward) finger pin position, you must have a shallow cut to lift the check pin. So whether you want to use a left, center or right finger pin, it must be shallow rather than deep. For left you have #1-shallow and #2-deep. For center you have #3-shallow and #4-deep. Prior to the introduction of the #5 finger pin, you only had for right, #6-deep. With the #5 pin there is now right-shallow. That will work with standard Everest. There is no need to worry about not choosing deep key cuts for your fifth finger pin position, because only the factory makes those cuts anyway. Now you'll know why.

I couldn't figure out why the #5 finger pin had been previously omitted from the Primus service kit. I was informed that with Classic Primus the #5 finger pin was used only on Level 4 (end user time zone or nationwide exclusive) sites. Since most Primus dealers had no use for that pin, it was omitted from the service kit to reduce the cost. With the need for a shallow cut to handle the Everest cylinder check pins, the need for a #5 finger pin grew. It is in the new service kits at no additional cost.

The sample products I used for this article were either pre-production or early production units. The logos on the keys and locks may appear a little different from final production units. Both Everest and Everest Primus are available in some "open"

keyways, so don't presume all Everest products should be considered truly restricted. There are different degrees of key control.

### Key Control Levels

The underlying purpose of Everest is key control. Prior to Everest, Schlage only had key control with Primus. There was no lower priced standard security product from Schlage that had key control. The Everest line fits the bill but is not truly restricted in all categories. There are three different families of keyways: B, C and D. The only real difference between Classic C keyways (pre-Everest standard security) and the Everest C Family is that the Everest C is only sold to commercial dealers and won't be found in home centers and shopping mall key stands. Everest C, though, can be stocked and duplicated without restrictions. The Everest D family, however, is truly restricted. The restricted keys have an ID # and can be traced to their origin. Everest D Family keys are drop shipped from the factory to an end-user specified location. The Everest B Family is also restricted, but is for SFIC (Small Format Interchangeable Core). In SFIC, Schlage offers a dealer exclusive keyway. These keys bear a dealer ID number rather than a facility ID.

Everest Primus (high security) will only be available in C and D Family keyways. It will not be available in SFIC (B Family). Key control lasts as long as the enforceable patent. Classic Primus has a patent that lasts into the year 2007. The patents for Everest and Everest Primus last until 2014.

Everest Primus cylinders and keys are now available for you to offer to your customers. The marketing of Everest and Everest Primus is centered on key control. If you have customers who are worried about who has copies of their keys, you now have another product option to give them.

For more information on Schlage products call: 800-847-1864 or (719) 264-5300; Fax: 800-452-0663; Web: [www.schlage.com](http://www.schlage.com).

You can look for any updates or corrections to any of my articles at my web site: <http://home.earthlink.net/~lockwrite>. Look under the link at "Tech Article Addendum." If you have information you think I should know, you can e-mail me. A link to my e-mail is on my web page.

# TUBULAR KEY MACHINES

## PART 3

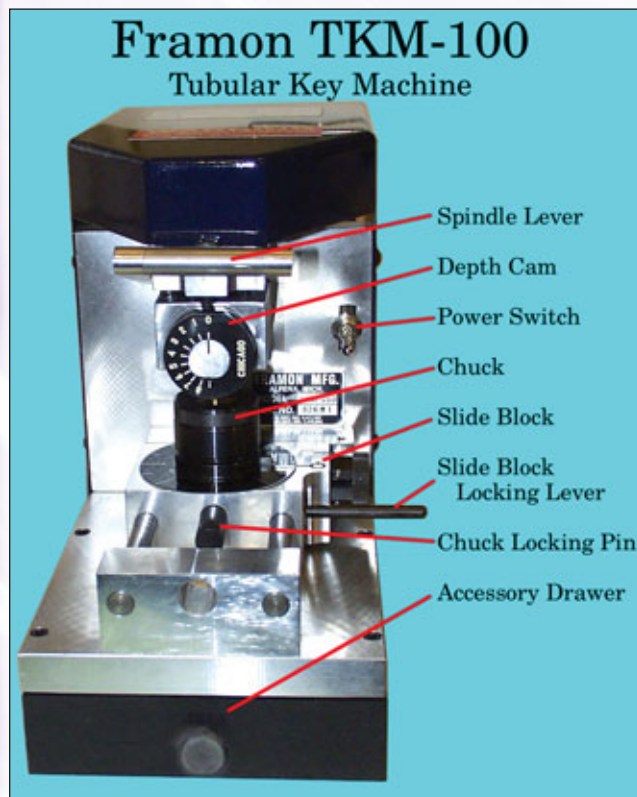


by  
**Bob Sieveking**

Last time in our series on tubular key machines we covered the HPC Scotsman™ 747XU Tubular Duplicode™ and ILCO/SILCA Crown Tubular Key Duplicator. This month we conclude with the Framon TKM-100.

### Framon TKM-100 Tubular

The Framon TKM-100 tubular key machine is a heavy-duty code machine. (See *photograph 1.*) The Framon TKM-100 is ten and one half inches (10-1/2") wide and sixteen inches (16") deep. It stands eight inches (8") high. The machine weighs thirty-three pounds (33 lb.). The TKM-100 uses 115 V AC power, but is also available with a 12 volt direct current (12V DC) motor for mobile use or a 220V AC motor.



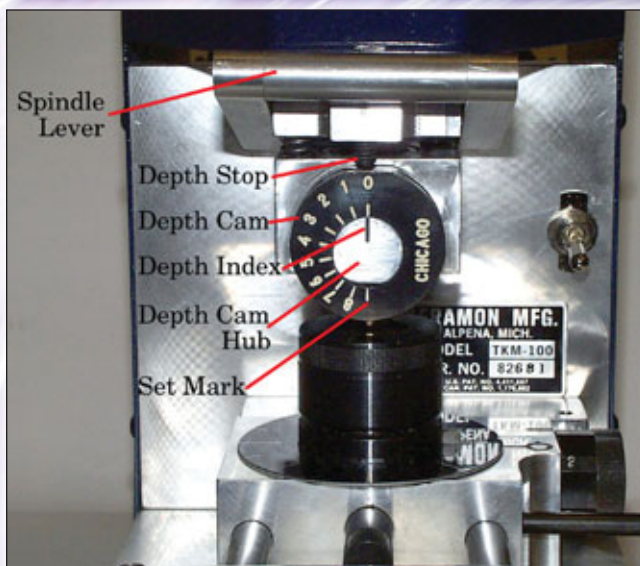
**1. The Framon TKM-100 tubular key machine.**

The Framon TKM-100 machine key chuck is designed to accommodate tubular keys from .365" O.D. to .406" O.D., which covers all popular tubular keys, from the small bore 137S to the large diameter UL keys. Pre-set spacing (elevation) adjustments allow the Framon to quickly make master cuts and cut-within a cut type keys. Unlike any other code machine, the Framon TKM-100 uses depth cams to preset the cut depths for different manufacturers, eliminating the need to adjust manufacturers codes to the calibration of the machine. Easy to read spacing plates, specific to the individual lock manufacturer, or configuration (right-center-left), allow cuts to be made without a great deal of mathematical interpolation. If cut spacing is non standard, a universal spacing plate calibrated in degrees can be used to accurately locate the cuts on the key. The TKM-100 uses a six flute carbide end mill cutter, designed to cut brass or steel keys.

In this shop, we prefer code cutting tubular keys to duplication. Probably more than any other type of key, the tubular key wears very quickly. The tip of the key wears away, shortening the actual length of the key bit. When duplicated, the new key has cuts made too shallow. The duplicated key will not operate the cylinder well. A new key cut to manufacturers dimension, will many times operate the customers cylinder noticeably smoother than the worn original. Decoding the customer's key only takes a few seconds. Decode and originate a new key rather than duplicating and perpetuating the performance of a worn one.

The Spindle Lever, at the top, controls the motion of the spindle. Pull the Spindle Lever down to advance the cutter into the key being cut. Release the lever to allow the spindle to spring back to the retracted position. The Depth Cam limits the vertical motion of the spindle and end mill key cutter. The Power Switch turns the motor on and off. The key being cut is held in the self-centering two-element V-block type key Chuck. Clockwise rotation of the chuck nut closes it to hold the key. The Slide Block moves to the front of the machine to load or remove the key.

With the key loaded in the Chuck, the Slide Block is moved to a position under the Depth Cam, to gauge the uncut key. When the key has been gauged, the Slide Block is moved to a positive stop at the rear of its' travel, which precisely positions the key under the



**2. The unique pre-set cut depth arrangement.**

cutter. The Slide Block Locking Lever lifts upward to lock the Slide Block in place. To release the Slide Block, push the lever down.

The Chuck Locking Pin secures the chuck in place to allow the closing nut to be tightened. Push the pin inward, with the chuck at the start position as shown in the photograph, to engage the locking pin. Pull the pin out to free the chuck rotation. The Accessory Drawer in the machine base, accommodates the Depth Cams, Spacing Plates, and an Allen wrench.

The unique pre-set cut depth arrangement of the Framon TKM-100 is detailed in *photograph 2*. As the Spindle Lever is pushed downward, the Depth Stop Screw contacts the top of the Depth Cam, limiting its' downward travel. With the Depth Cam in the position shown in the photograph, the cutter would advance to the key tip without removing any material. This would be a zero ("0") or "no cut." If the Depth cam is rotated to bring the number one (#1) on the Depth Cam into alignment with the Depth Index, the Depth Stop would contact the Depth Cam at a position to allow the Cutter an additional sixteen thousandths of an inch (.016") of travel. The cutter would advance down to the tip of the key, and .0016" more. A cut would be made in the key tip, exactly .016" in depth.

Rotate the cam to the number three (#3) position, to make a .032" deep cut in the key tip. The Depth Cam labeled "Chicago," is calibrated to generate cut depths that agree with the Chicago Lock™ depth specification. The Depth Cam is not a simple eccentric cam. The edge of the cam is milled to form individual precision seats, which accommodate the Depth Stop Screw, and present a flat surface for the stop. The stamped and filled graduations on the face of the Depth Stop Cam, align the stop seat at the correct position under the stop screw when a depth is selected by the Depth Index. The "Set Mark," on the Depth Cam is used to position the cam to gauge the key before beginning the cutting process.

The Depth cam rotates on the Depth Cam Hub, and is removable to accommodate other depth cams. *Photograph 3*, shows the four options. The Chicago™ cam, shown at number 1, which we looked at earlier, is



## Pocket InstaCode

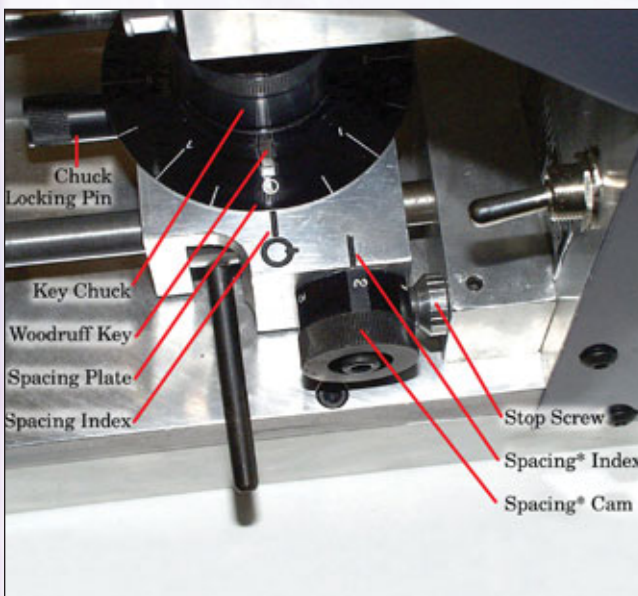
Pocket InstaCode has all the important features of the InstaCode program, packed into a program small enough to run on a Pocket PC.

[CLICK HERE TO LEARN MORE](#)

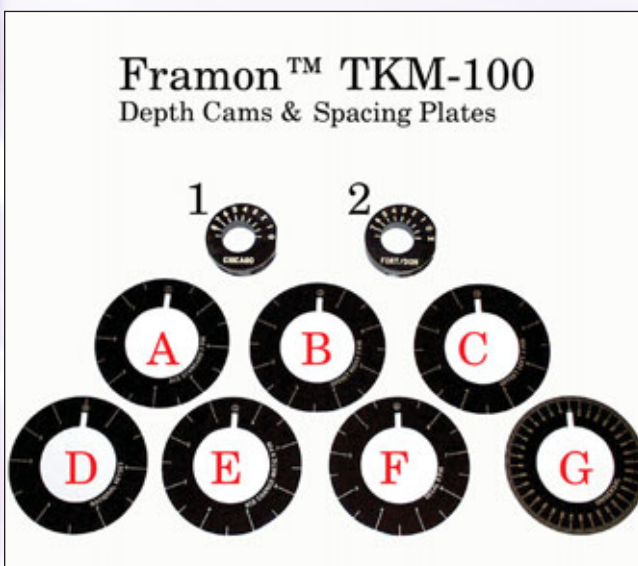
#PCODE-03



3. The Depth cam.



4. The Spacing Plate fits over the Key Chuck.



5. The standard Spacing Plates used.

calibrated to produce keys using Chicago depths. The reverse side of the Chicago™ cam, shown at number “1r,” is calibrated to produce cut depths that agree with Dynalock™ and Unican™ cylinder manufacturers. A second Depth Cam, shown at “2,” is calibrated to Fort Lock™ and Dominion™ depths. The reverse side of the Fort cam, shown at “2r,” is calibrated to American Lock™ tubular key depths. Two reversible Depth cams furnish us with “preset depth calibration” for nearly all major tubular lock manufacturers specifications. The cam numbering also agrees with each specified manufacturers published codes. Some exceptions may exist, but I have not experienced them.

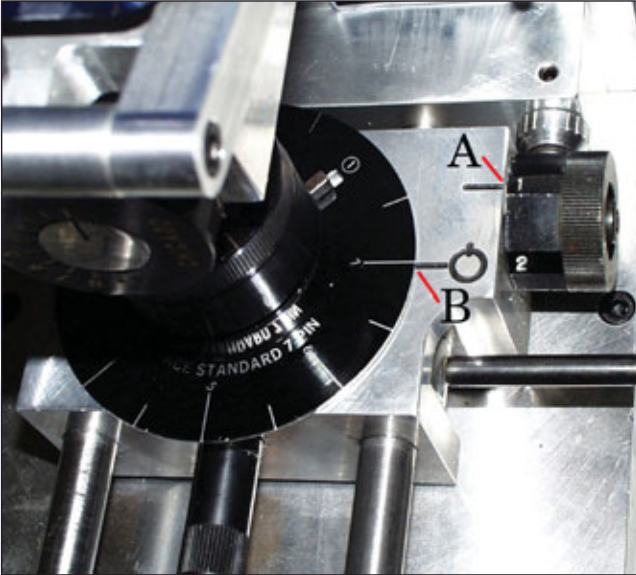
Now that we have covered the method used by the Framon™ TKM-100 to specify the cut depths, let’s consider the cut spacing on the key tip. The rotating key chuck is mounted to the Slide Block, and is free to rotate three hundred sixty degrees (360°) when the Chuck Locking Pin is retracted. The cutter can place a cut at any point on the edge of the key. To accurately position the cuts on the key bit, The Framon™ TKM-100 uses a calibrated Spacing Plate. As you see in *photograph 4*, the Spacing Plate fits over the Key Chuck and locates on the Woodruff Key. The Woodruff Key rotates with the Key Chuck. As the Key Chuck is rotated, the Spacing Plate moves with it. By using the Spacing Index with the calibrations on the Spacing Plate, we can position the key to receive cuts in most desired configurations (7-pin right, 7-pin left, 7-pin centered, 8-pin, and etc.). The Spacing Plate shown is calibrated to place the cuts in a 7-pin centered configuration. This is Plate Number “1.”

*Photograph 5*, shows the standard Spacing Plates used with the Framon™ machine.

They are:

- A) .....ACE™ spacing Plate .....7-pin centered
- B) .....Offset Right.....7-pin right
- C) .....Offset Left .....7-pin left
- D) .....National Keyset™.....7-pin
- E) .....ACE™ Change-A-Matic .....8-pin
- F) .....Segal™ .....8-pin
- G) .....Universal 360° .....Calibrated in 2° Increments

Because the Framon TKM-100 is designed to cut a variety of different key diameters and must be able to make keys that have stepped cuts (cut within a cut) and oversized cuts (master pins), it is necessary to regulate the distance from the center of the key chuck to the cutter. On previous machines, we referred to this adjustment as “elevation.” Framon prefers to call this adjustment “Spacing\*.” Don’t confuse this with the “Cut Spacing,” discussed above. This Spacing\* refers to the spacing that regulates the web dimension of a tubular key. *Photograph 4*, shows the Spacing\* Cam and Spacing\* Index. As the Slide Block moves to the rear of the machine, the Spacing\* Cam will contact the Stop Screw, limiting its’ travel. The numbered (calibrated) position of the Spacing\* Cam, read at the Spacing\* Index accurately determines the position (elevation) of the Slide Block. The Spacing\* Cam has six positions, to cover the possible spacing requirements for most tubular keys.



**6. Bring the depth number into alignment with the Depth Index.**

They are:

- 1.....standard diameter (.375) .....regular cuts
- 2.....standard diameter (.375) .....master cuts
- 3.....small diameter (.365) .....regular cuts
- 4.....small diameter (.365) .....master cuts
- 5.....large diameter (.400) .....regular cuts
- 6.....large diameter (.400) .....master cuts



**7. The machine comes with a precision dial test indicator.**



## ProMaster 5

ProMaster 5 is without a doubt, the most comprehensive and easy to use master-key system management tool available anywhere in the world.

[CLICK HERE TO LEARN MORE](#)

#PM - 5

To make a key with the Framon TKM-100, we will suppose a standard 137 key, using a 7-pin centered configuration and Chicago™ depths. Move the Slide Block Locking Lever down, to unlock the Slide Block. Move the Slide Block to the front of the machine. Rotate the chuck to align the Woodruff Key with the Spacing Index on the Slide Block, and engage the Chuck Locking Pin. This will lock the Key Chuck in position, so we can open (loosen) or close (tighten) the Chuck on our uncut key. Select the proper Depth Cam and Spacing Plate. Install the Depth Cam on the Depth Cam Hub and rotate the Depth Cam to bring the Set Mark to the Depth Index. This Position will be used to gauge our uncut key.

Install the correct Spacing Plate over the Key Chuck, observing the position of the Woodruff Key to insure that the Spacing Plate is installed properly and locked in place. From our chart (above), or from the Framon depth and space book, we find that a standard diameter (137) .375" O.D. key, having regular cuts, uses the number one (1) position of the Spacing\* Cam. Rotate the Spacing\* Cam to align the number one (1) with the Spacing\* index on the Slide Block. This will adjust the "elevation" of the cuts properly for the key being cut. The machine is now ready to receive the key.

Insert a blank 137 tubular key into the Chuck, and close the Chuck lightly. Observe the orientation of the key icon, at the end of the Spacing Index. The locating key of the blank is away from you. Press the key down against the spring pressure of the Chuck and tighten the chuck temporarily.

Move the Slide Block rearward to bring the key directly under the Depth Cam. Notice that the Depth Cam presents a flat surface at the bottom when it is in the Set (Set Mark) position. Open (loosen) the Key Chuck slightly, to allow the uncut key to pop up. It will pop up, to be gauged on the bottom surface of the Depth Cam. This operation sets the correct height for the key, with respect to the cutter. Retighten the Key Chuck.

Move the Slide Block to the rear of the machine. Rearward movement will be stopped by the Spacing\* Cam as it contacts the Stop Screw. Lift the Slide Block Locking Lever, to lock the Slide Block in position. We are ready to make our key.

Pull the Chuck Locking Pin forward to release the rotation of the Key Chuck. Rotate the chuck to bring the #1 position on the Spacing Plate into alignment with the Spacing Index. Select the desired depth on the Depth Cam and bring the depth number on the Depth Cam into alignment with the Depth Index on the Depth Cam Hub. (See photograph 6). Turn on the Power Switch and press down the Spindle Lever carefully. Congratulations, you just made the first cut in the key.

Advance the Key Chuck clockwise to bring the number 2 on the Spacing Disk to the Spacing Index. Select the appropriate depth, and turn the Depth Cam to bring the depth number to the Depth Index on the Depth Cam Hub. Press down the Spindle Lever carefully, to make the second cut. Continue, as above until all cuts have been made. Turn the Power switch



## Safe Deposit Box Service

There is gold in  
safe deposit boxes!

CLICK HERE TO LEARN MORE

#SDBS - 1

off. Release the Slide Block Locking Lever to bring the Slide Block to the front. Lock the Key Chuck in position with the Chuck Locking Pin, and open the Key Chuck. Remove and de-burr the key on a flat piece of emery cloth.

The Framon key machine comes with a precision dial test indicator, shown in *photograph 7*. The Indicator is fitted with a special fixture to measure and decode tubular keys. This device makes key measurement fairly quick and easy. Check the cut key to insure that your machine is cutting accurately. The indicator is also used to decode customer keys.

A Chicago ACE™ key was decoded using the Framon tubular key decoder and the Framon depth chart. A duplicate was made by code, using the Framon™ TKM-100 key machine. The test key operated the test cylinder perfectly.

I hope you found this review as exciting as I did. Test driving all of these machines, and studying the literature that accompanied them was very educational for me. Maybe you picked up something too. I certainly hope so. Good Luck.

*For more information on the manufacturers covered, contact:*

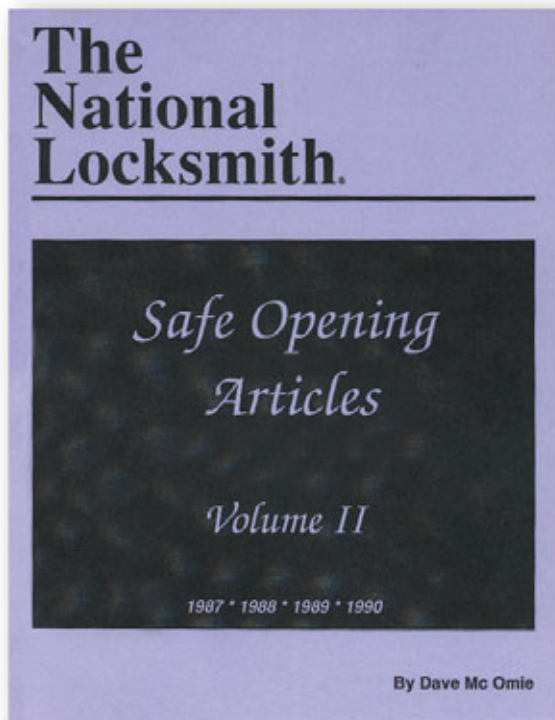
A-1 Security Manufacturing Corp.  
3001 West Monroe St  
Richmond, VA 23230  
Phone: 877-725-2121, (804) 359-9003  
Fax: (804) 359-9415  
E-mail: fmcc@demanda1.com

Web: [www.demanda1.com](http://www.demanda1.com)  
Circle 261 on Rapid Reply

Framon Manufacturing Company, Inc.  
909 Washington Ave.  
Alpena, MI 49707  
Phone: (989) 354-5623  
Fax: (989) 354-4238  
E-mail: [framon@northland.lib.mi.us](mailto:framon@northland.lib.mi.us)  
Web: [www.framon.com](http://www.framon.com)  
Circle 262 on Rapid Reply

HPC Inc.  
3999 N. 25th Ave.  
Schiller Park, IL 60176  
Phone: 800-323-3295, (847) 671-6343  
Fax: (847) 671-6343  
E-mail: [hpc@hpcworld.com](mailto:hpc@hpcworld.com)  
Web: [www.hpcworld.com](http://www.hpcworld.com)  
Circle 263 on Rapid Reply

Silca (Kaba Ilco Corp.)  
400 Jeffreys Rd  
Rocky Mountain, NC 27804  
Phone: 800-334-1381, (252) 446-3321  
Fax: (252) 446-4702  
E-mail: [info@irm.kaba.com](mailto:info@irm.kaba.com)  
Web: [www.kaba-ilco.com](http://www.kaba-ilco.com)  
Circle 264 on Rapid Reply 



## Safe Opening Articles

Dave McOmie's original articles from when he first started writing for The National Locksmith are reprinted in this book.

CLICK HERE TO LEARN MORE



# FREE

## Literature & Brochures

### Aable on the Web

Aable Locksmiths' new catalog is now available on the web at: [aable.interwit.com](http://aable.interwit.com). The entire line of products, designed and patented by Frank Markisello, are shown complete with prices. Pages can be

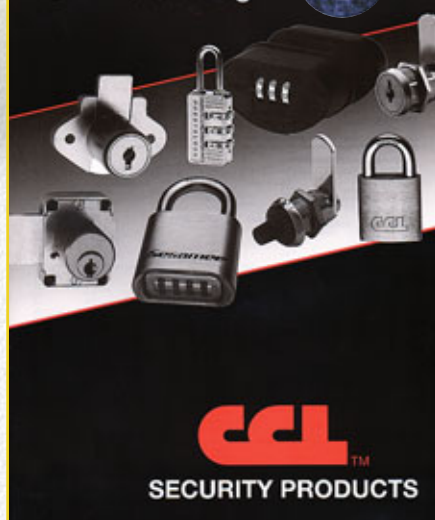


downloaded and printed. Frank, who has been in business as a locksmith for over 32 years, is available to answer any questions regarding the tools or their application.

### CCL Full Line Catalog

CCL Security Products' catalog contains both alphabetic and product type indexes for the entire line of cams and cabinet locks, chest and drawer locks and catches,

### Full Line Catalog



handles, holding plates, Prestolocks, Sesamee locks, special purpose locks and more. The catalog is illustrated with product photos, as well as line art of product dimensions. Also included in the catalog are CCL key blanks and keying kits for cabinet locks, as well as countertop display boards to show the product line. Further product details can be found on the company's web site: [www.cclsecurity.com](http://www.cclsecurity.com).

### Commercial Van Equipment Catalog

The 2001 Adrian Steel Commercial Van Equipment catalog features a new 3 year/36,000 Mile

Product Warranty making it the best in the industry for van and pickup equipment. A new drawer design is also featured with a Lock 'n Latch system for safe locking, secure latching and interchangeable drawers. Adrian Steel offers a full line of steel drawer units, cabinets, shelving, bins, partitions, book files, ladder racks and accessories for full size and mini vans. Arrange an interior from our components and modules or choose from pre-packaged interior arrangements. Distributor out-of-stock or factory ship-through upfits on all van and pickup equipment is available.



Continued on page 64

**Continued from page 62**

Request a catalog on the web at [www.adriansteel.com](http://www.adriansteel.com) or call toll-free (800) 677-2726 for more information.

**DORMA Catalog**

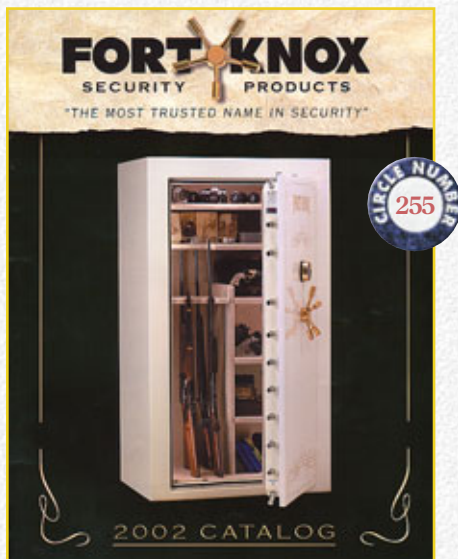
DORMA Architectural Hardware has earned a widespread reputation for supplying the commercial openings industry with products that invoke security, safety and convenience around the door. DORMA manufactures and markets a complete line of door controls, exit devices and electronic access control hardware. Employing the latest technological processes, DORMA is able to guarantee absolute tolerance accuracy, advanced design, and the use of the newest materials to meet the challenges of the future, today.



For a free copy call DORMA at: (800) 523-8483 or visit [www.dorma-usa.com](http://www.dorma-usa.com) to download a .pdf file.

**Fort Knox Security Products**

Fort Knox is the most trusted name in security. We offer thirty



models of quality, UL Listed gun safes, home safes and vault doors at affordable prices. Certified fire protection, lifetime warrantee, modular interiors, 8 colors, state of the art locking mechanism and many options and accessories that make Fort Knox truly, "Americas Best"!

For a catalog call: 800-821-5216.

**Indiana Cash Drawer**

Indiana Cash Drawer Celebrated 80 Years of Cash Drawer Manufacturing in 2001! Our continually expanding product line allows us to serve those new to the industry, as well as third-generation customers-worldwide! For innovation and customization, rely on ICD.

For more information call: (800) 227-4379; Web: [www.icdpos.com](http://www.icdpos.com).



**Jensen Tools 2002 Master Sourcebook**

Jensen Tools, a premier tool kit designer and full-line distributor of tools and test equipment to the electronics service industry worldwide, has just released their all-new Master Sourcebook for 2002. The catalog features an extensive selection of tool kits, carts and cases, test equipment, hand and power tools, telecom products, wire/cable and fiber optics, computer and LAN products, soldering/desoldering equipment, lighting and optical products, workstations, storage solutions, shop supplies, field accessories and much more.

For a free copy call: (800) 426-1194 or (602) 453-3169; Fax: (800)



366-9662 or (602) 438-1690; E-Mail: [jensen@stanleyworks.com](mailto:jensen@stanleyworks.com); Web: [www.jensentools.com](http://www.jensentools.com).

**Kaba Ilco Access Control**

Imagine a whole family of locks operated with codes instead of keys. That is what you get with Kaba Ilco pushbutton locks. These locks are a basic component in any large access control system or a complete system by themselves for smaller premises. They are perfect for any location where many people need controlled access to a few doors. They are especially useful in commercial, institutional, residential, industrial, military and government buildings and are ideal for areas with high personnel turnover rates.



**Continued on page 66**

**Continued from page 64**

For a catalog call: 800-849-8324 or (336) 725-1331; Fax: 800-346-9640 or (336) 725-3269.

### Lund Key Control Catalog

Lund Key Cabinets, featuring visible key control, are described in the new 16-page catalog. New products shown are a key cabinet with a locking inner compartment and a locking exterior door, a dual lock key cabinet for extra security, and a locking storage cabinet. Prison key cabinets of all sizes are also included.

Lund makes over 70 different styles of key cabinets and panels, all complete with systems for controlling keys. Capacities range from 10 hooks to 3312 hooks. The system can be one tag or two tags.

For information, write to Lund Equipment Co., Inc., P.O. Box 213, Bath, Ohio 44210. Phone (330) 659-4800.

### MBA's New Catalog

The new 2002 catalog from MBA USA, Inc. is filled with safe locks, tools, borescopes, and the schedule and descriptions of all the training classes we offer.



Contact us at: (888) 622-5495, to be added to our mailing list.

### Perma-Vault

Perma-Vault Safe Company's product catalog contains photos and

specifications of a broad assortment of cash protection system units, hopper safes, wall safes, in-room safe deposit boxes, cash boxes, pistol boxes, through the wall or door depository safes, depository safes, hotel safes, safe deposit boxes and in floor safes. The company custom builds safes, to assist in satisfying a particular customer's needs.

For more information call: (800) 662-3360; E-mail at: sales@perma-vault.com.

### Safety Technology International, Inc.

Safety Technology International, Inc. manufactures protective covers, multi-purpose push buttons, and alarms to help prevent theft and vandalism to: fire pull stations, smoke detectors, strobe/horns, biometrics, keypads, exit signs, emergency lights, clocks and bells.

Covers are manufactured from polycarbonate, 9 gauge, corrosion resistant, steel wire or stainless steel. The company also manufactures extinguisher alarms, to help prevent theft and misuse of fire extinguishers and exit alarms, to warn of unauthorized entries and exits. Many products carry a lifetime warranty and are UL/cUL listed.

For more information call: (800) 888-4STI (4784) or (248) 673-9898; Fax: (248) 673-1246; E-Mail: info@sti-usa.com; Web: www.sti-usa.com.

### Seco-Larm

Providing a complete listing of the burglar security products and accessories that have made SECO-LARM® the dealer's choice, the new, 1st quarter 2002 catalog is hot off the press. Covering RF transmitters and receivers, alarm pager systems, electromagnetic locks, photo beam detectors, voice dialer, alarm control panel, access control keypad, shear lock, electric deadbolt, electric door strikes, push-to exit bar, push-to-exit plates, door cords, power supplies/chargers, timer module, audio discriminator, and much, much more. The catalog includes our newest, state-of-the-art products.

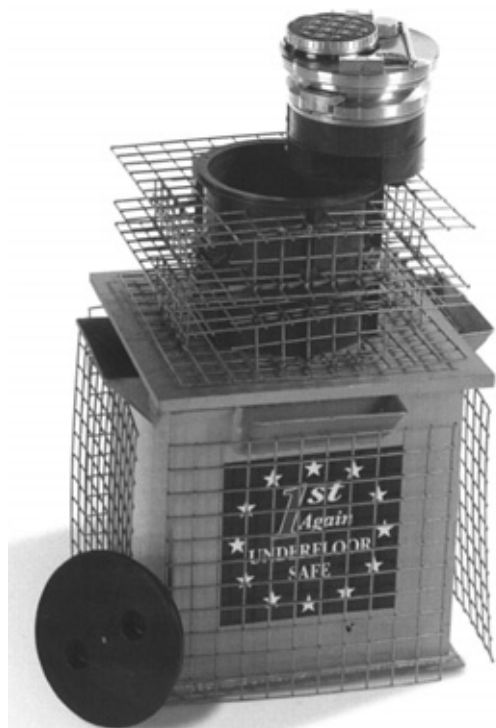
Along with product descriptions, catalog entries include photographs, and, where needed, circuit/connection diagrams and comparison charts to assist the buyer in making the best product decision.

For a catalog call: (949) 261-2999; Fax: (949) 261-7326; Web: www.seco-larm.com. **TNL**

# Churchill Safes

## The Next British Invasion

by Todd Kern, CPS, CMS



Photograph 1.

Do you know of a floor safe with a rating equivalent to a TL30 x 6? If not, read on.

Churchill Safes USA, is debuting their product line this year at the SAVTA trade show in Reno, Nevada, but Churchill is no new comer to the industry. They are part of the Gunnebo Group, which consist of Chubb, Tann, Rosengrens, and Fichet Bauche. Churchill started in the early 1970's, producing safes for the Dreadnought Safe Co., a division of John Tann.

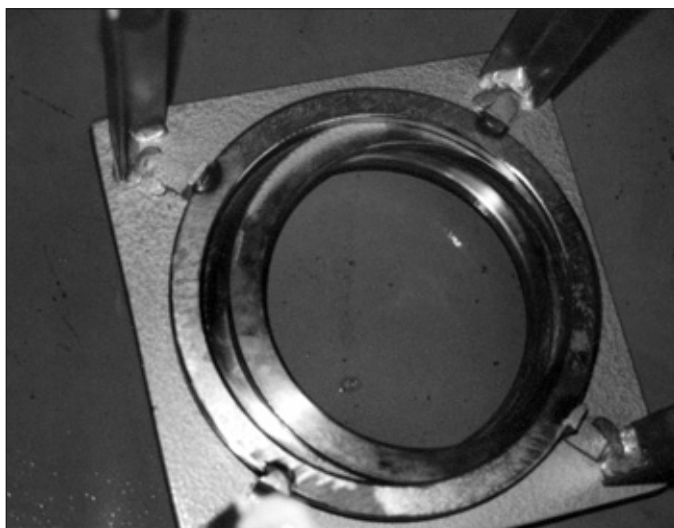
Continued growth in the last 30 years has put Churchill Safes as the leaders in the market place for floor safes in the European theater. Producing well over 10,000 safes a year, you will find the quality second to none.

All Churchill Safes are produced to ISO 9002 (BS5750) quality assurance standards and have been tested independently by the European testing authorities, which include The Loss Prevention Council of the UK. All safes were awarded certificates of compliance, according to their respective grades. Currently the Euro Emerald is the only floor safe in the world to be awarded the Euro Grade 3 label. (See photograph 1.) This brings us to the question, "What does an ISM TL-30 x 6 Ultra Vault have in common with a Churchill floor safe?" Answer: the European Safe rating committee in the 2000 Blue Book rates them both a 15. This is the book that insurance companies such as Lloyds of London use to assess insurance coverage for a particular safe.

The only other American floor safe listed in the book is the Major floor safe, which their TL-15 is rated an 8.



Photograph 2.



Photograph 3.



Photograph 4.



Photograph 5.

What makes a Churchill Grade 3 stand out? The doors are made of stainless steel and have incorporated ball bearings and copper plating into them, making them both torch and drill resistant. (See photograph 2.) You have your choice of locks: A class B High Security unpickable key lock, a 4-wheel combo lock or an electronic lock.

Under the collar of the safe is a ring, that when the door is locked, extends the ring into a lip that surrounds the door to prevent pulling attacks. (See photograph 3.) In essence, over half the circumference of the door is engaged in the locking action.

The Euro Emerald can also be equipped with a deposit chute. A unique tubular design that not only has anti-fish baffles, it also has a locking cap that covers the chute to stop fishing attacks cold. (See photograph 4.)

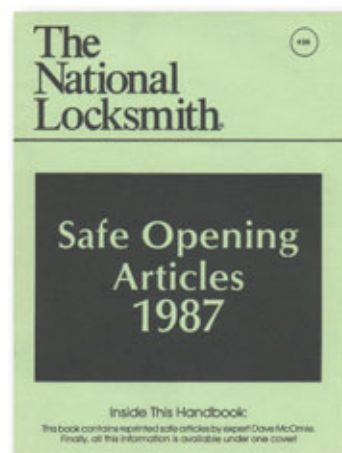
Does all this sound like too much security? If so, then let's take a look at the domestic product line. (See photograph 5.) Churchill produces one of the most economical high security safes on the market today for residential or light commercial use. As time goes on and the value of the contents of the safe increases, there is no need to buy a new safe, the doors are upgradeable for higher security. All safes have dust covers and optional extended necks to add security.

Churchill Safes offers a wide range of floor safes in various configurations to meet any security need.

For more information on Churchill Safes USA call Jim Jeffries at: 866-577-7233.

TNL

## Safe Opening Articles 1987



Now under one cover—all the information safe opening articles by expert safeman, Dave McOmie.

CLICK HERE TO LEARN MORE



#SA - 1

# MULTIMETERS

An  
In-Depth  
Overview

## PART 3

by Richard Allen Dickey

Digital, digital, digital. Everyone has gone digital. At least that is what some will tell you. A digital multimeter is easy to read, easy to use and usually easy to understand. If you read the last article, you will probably agree that in most cases it is hard to screw up with a digital multimeter.

However, there are times when I am so relieved to have an analogue multimeter. What's the big deal? Well, did you know that when testing AC or DC voltage with an analogue multimeter, you don't need a battery in the multimeter? That's not true with a digital multimeter. I bet a lot of you didn't know that!

Why? Because the voltage that you are reading is what actually makes the needle move on an analogue multimeter. Then why is there a battery inside an analogue multimeter? Because it is there to provide the power needed to test resistance.

There is another reason for using an analogue multimeter that you might find interesting. Here is an example. If something is wrong with a power supply and it starts pulsing, the display on a digital multimeter will just flash or show constantly changing numbers that don't mean anything. This type of display can also happen if there is nothing for the multimeter to read. So there are times when you can ask yourself, is there something there or is the meter just acting a little weird?

The needle on the display of an analogue multimeter will fluctuate under these conditions. Often it will fluctuate between two values. This could be very useful at times. Exactly how the needle will fluctuate

will depend on a lot of different factors. For instance, how drastic is the fluctuation in voltage or how fast is the fluctuation in voltage. Both of these factors will make a difference in exactly how the needle will move.

For those who were not able to read part I and part II, here is the basic difference between a digital and an analogue multimeter. (See photograph 1.) The digital multimeter will have a liquid crystal display (LCD) while the analogue multimeter has a needle that moves from left to right. This is a very basic explanation, but it is good enough for now.

Let's take a look at a typical display on an analogue multimeter. (See photograph 2.) To start with, the top portion of the display is only used to read resistance. (See photograph 3.) The middle part of the display is used to display AC and DC voltage as well as current readings. (See photograph 4.) The very bottom part of the display is used to read audio levels. (See photograph 5.) You will probably never have a need to measure audio levels, so we will ignore the very bottom of the display.

Now that you have seen the numbers all over the face of the display, it is time to explain how to use them. The easiest way to start is in the voltage portion of the display. With the selector switch set to "10 DCV" what part of the scale do you use. (See photograph 6.)

Take a look at the far right side of the display. You will see a "10", "50" and a "250" circled. (See photograph 7.) These three numbers correspond to settings on the selector. With the selector set to "10 DCV"

**Continued on page 72**



1. Here you can see a digital and an analogue multimeter side by side.

**Continued from page 70**

you will use the portion of the scale that ends in "10". The portion of the scale that ends in "10" has five other numbers included. Those numbers are 0, 2, 4, 6 and 8.

In *photograph 8*, I am testing a DC voltage with the selector switch set to "10". Can you figure out what the voltage is? *Photograph 9*, shows a close up of the needle to make things a little easier to read. That's right, it is just barely under "2" volts. If you thought it was just over "2", you would have been wrong and here is why.

You were either looking at where the needle passes through the number or you were looking at the lines on the red portion of the display. The red portion of the display is for ACV and I will show you why later. The numbers are just there for reference. You always have to use the lines on the scale to make your reading. When the selector is set to black, you must use the black scale.

What if the selector switch was set to "250" instead of "10"? (See *photograph 10*.) The needle is in exactly the same position as before.



**2. This is a typical display on an analogue multimeter.**



**3. The top part is only used for resistance.**



**4. The central part is used for AC and DC voltage measurement as well as current readings.**

(See *photograph 11*.) But because we are using a different portion of the scale, the same needle position means something totally different. In this case the reading is just barely under "50" volts.

Lets look at another example. With the selector set to "500" what part of the scale would you use? (See *photograph 12*.) The numbers on the far right (refer back to *photograph 7*) are "10", "50" and "250". There is not a "500" there. To save room on the display, the manufacturers use a shortcut. If we added a "0" to the "50" we would have a "500". The other numbers within the same scale are 0, 10, 20, 30 and 40. (See *photograph 13*.) By simply adding a "0" to each of these numbers, you get 100, 200, 300 and 400.

The same thing is done when the selector is set to "2.5" DCV. You use the "250" scale and slide the decimal place to the left two places. This is an easy one. The number "150" in the "250" scale is equal to "1.50" when



**5. This is the audio level section. Something you will probably never use.**



**6. The selector switch set to 10 DCV.**



**7. This display has three different scales.**

the decimal place is slid to the left two places.

Now with this new information, take a look at *photograph 13* and decide what the display is trying to say. Did you say "170" volts? If you did you are right. If you did not, lets take a closer look at the scale.

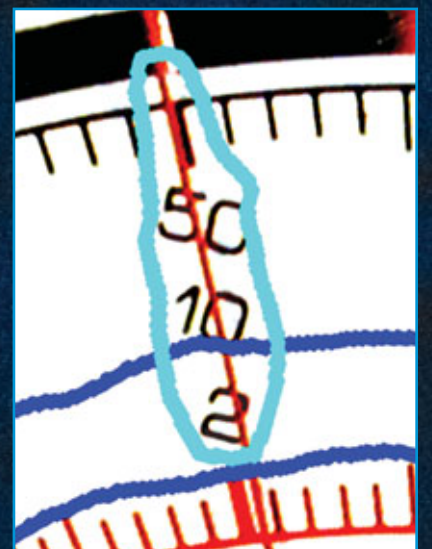
*Photograph 14*, is a close up of the needles position on the scale. The thick black marks correspond to the numbers 10 and 20 on the scale. Between the thick black marks are nine thin black marks. Each thin black mark is equal to one in this example. If you start at the thick black mark above the "10" and count each thin black mark as "1", you will end up with "17" by the time you get to the needle. Add that extra "0" we discussed earlier and the "17" becomes "170" for our 170 DCV. Now that wasn't so bad, was it?

Now let's try something just a little different. Instead of using the DCV selection on the analogue multimeter, let's use one of the ACV selections for measuring AC voltage.

Set the selector switch to "10" on the ACV side. All of the ACV settings are in red. (See *photograph 15*.) Why? It is telling you that you need to use the red part of the display to properly read an AC value. (See



**8. We are testing a DC voltage with the selector switch set to 10 DCV.**



**9. Here is a close up of the display.**



**10. The selector switch is now set to 250 DCV.**

photograph 16.) You still use the black numbers, but you need to use the red lines. (See photograph 17.)

Photograph 18, shows a close up of the needle. We can see several things in the close up. First of all, the needle is to the right of the thick red line, but slightly to the left of thick black line up above. The reason I mention this is to show that there is a difference between the red and black scales. Not much, but a little.

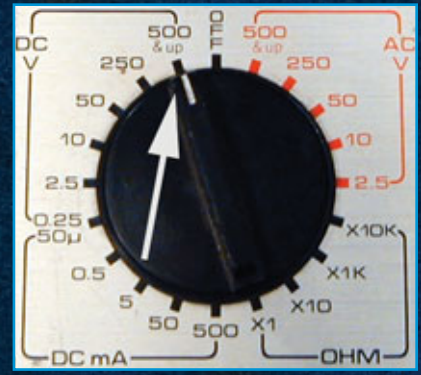
Looking at the needle position on the red scale in photograph 18, what does it read? It is a little past the "2" but not by much. Earlier when we



**11. The needle is in the same position as before. But the value of the reading is different.**

looked at the "50" DCV scale, the value of each thin line that was between the two thick lines was equal to "1". If we were using the "50" scale this time, the thin red lines would also be equal to "1". However we are using the "10" scale. So what is each red line worth?

To figure this out, you just have to think a little. The two thick red lines are below the "2" and the "4". If we go half way between the "2" and "4" there is a long thin red line. Because it is half way between the numbers "2" and "4", the long thin line is equal to "3". That was the easy part. Now look between the "2" and the "3". There are four thin red lines. Each thin red line is equal to ".2" or "2/10" (two tenths).



**12. With the selector switch is set to 500, which scale do you use?**

If you counted one thin red line to the right of the thick one that is under the "2", you would have "2.2" or "2 and 2/10" (two and two tenths). Since the needle is half way between the thick line and the first thin line, it is half of "2/10" (two tenths), or equal to "1/10" (one tenth). So the actual reading of the needle is "2.1" or "2 and 1/10" (two and one tenth). We should do one more just to be sure you got it.

We will still use the "10" selector position like we did in the last example. So what part of the display will we use? That should be easy. We use the red AC portion of the display

## Safe Opening Volumes 1, 2, 5



These are the classic safe books you will need to open most any safe easily and professionally.

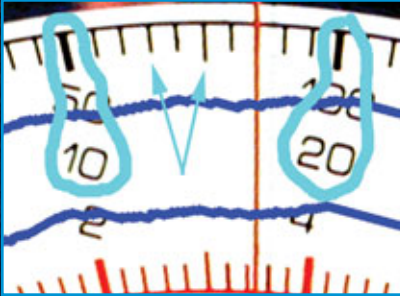
- Volume 1 - Modern Safes
- Volume 2 - Modern Safes
- Volume 5 - Very Recent Safes

[CLICK HERE TO LEARN MORE](#)





13. The 50 scale is used. Just add a zero to the reading to get the correct answer.



14. Here is a close up of the new reading.



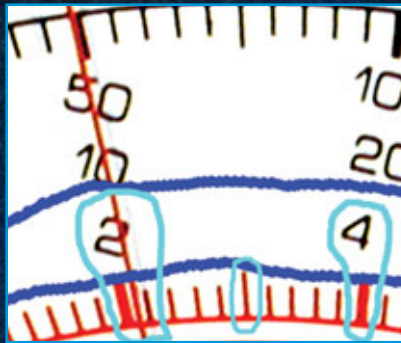
15. Now the selector is set to 10 ACV.



16. To read ACV you must use the red part of the display.



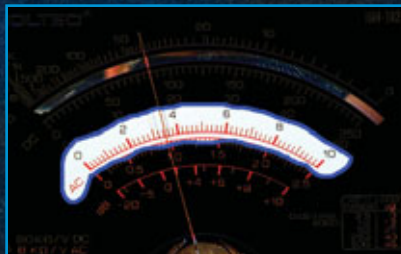
17. You still use the black numbers, but you must use the red lines.



18. Here is a close up of the ACV reading.



19. For this new reading, the same part of the scale is used.



20. To make things easy, black out all of the parts of the scale that are not used in your mind.



21. Here is a close up of the scale.



22. This is a special scale for reading 2.5 volts AC only.

and the number scale that ends in "10". (See photograph 19.) Don't pay any attention to the rest of the display. Here is a trick. Just kind of mentally black out everything on the display except the part you are using.


I don't like to make ugly pictures, but I think I need to this time. Photograph 20, is an example of what you should be looking at with the selector switch set at "10" on the ACV section. I have blacked out everything that is not used for this reading, kind of like what I said to do in your mind. If you do this every time you take a measurement, you will find that things will be a lot simpler.

A close up of the display clearly shows the needle half way between the long thin red line and the thick red line that has the "4" above it. (See photograph 21.) We need to figure out the value of the long thin red line between the two thick red lines. Just like before, it has a value of "3". Since the needle is halfway between the "3" and "4", our reading is "3.5" or "3 and 1/2" (three and one half).

If you would prefer to count each thin line between the "3" and "4", that is fine too. Just like earlier, each thin red line is equal to ".2". Two and a half red lines, times ".2" equals ".5". Add the ".5" to "3" and you still get "3.5".

There is one more scale to look at in the ACV area. It is a scale set up specifically for "2.5" volts AC. (See photograph 22.) Not all analogue multimeters will have the same displays, but you will figure them out the same way. Since this display has a "2.5" scale that is in red, it is only used while in the "2.5" ACV setting.

These types of readings are about the toughest you will run into with an analogue multimeter. I picked something tough because easy doesn't teach you anything. I know it took several steps to get the answer, but don't forget the basics. The color that the selector switch is pointing to, tells you which color scale to use. The number that the selector switch is pointing to, tells you which set of numbers or scale you need to use to read the correct answer. Once you know which part of the display to use for your reading, you can ignore the rest of the display.

Next month I will cover resistance measurements with an analogue multimeter and how to calibrate the multimeter. See you next time. 

# Beginner's Corner

## M.A.G.'s Metal Solutions



**1. A split door around the latch is a result of a kick-in attack.**



**2. A Door Reinforcer strengthens the weakened area and conceals the scar.**



**3. What do you do to conceal existing holes not needed?**

Whether the job requires modification, retrofit, or just the finishing touches, many of the answers come from one of the earth's oldest resources, metal.

When replacing the door is not in the budget, or you would like the piece of mind of having more protection against forced entry, a Door Reinforcer is the solution. The Door Reinforcer is a metal base product that provides extra security against a kick-in and repairs a door after it has been damaged. (See photograph 1.) Once a door is split around the latch area, there is little you can do to repair it besides install a Door Reinforcer. It not only reinforces the weakened area making it stronger



**4. A Door Reinforcer used to conceal holes for a retrofit application.**

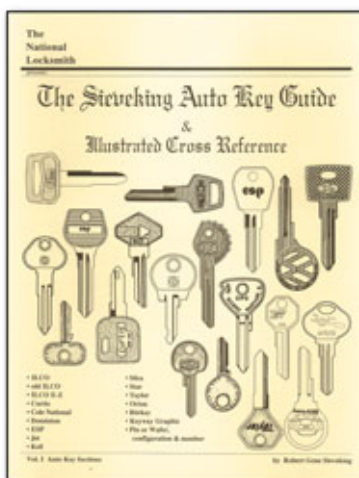
than ever, it conceals the scar, adding a polished beauty to a once ugly sight, and is considerably less expensive and faster to do, than replacing the door. (See photograph 2.)

With locksets continuing to adapt to today's technology and design, the need to retrofit the existing door to accommodate a new lock is becoming a common procedure. (See photograph 3.) One such example is converting from a standard cylindrical knob lock and deadbolt to a Kaba Ilco push-button lever lock. (See photograph 4.)



**5. Kick marks at the bottom of the door.**

## Sieveking Auto Key Guide

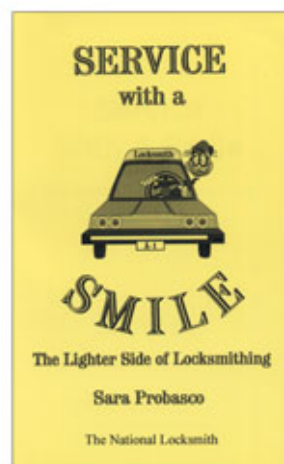


The Sieveking Auto Key Guide lists over 2,600 automotive and motorcycle keyways, covering makes from Acura to Zundapp, and listing fourteen popular key manufacturer numbers.

[CLICK HERE TO LEARN MORE](#)

#AK - 1

## Service with a Smile



To tickle the funnybone of anyone in a service oriented business.

[CLICK HERE TO LEARN MORE](#)

#SWS



6. Paw prints on the side.



8. A brass push plate.



7. A brass kick plate.

All M.A.G. Door Reinforcers are made in the USA from solid material that will match many of today's modern lock finishes.

**Door Reinforcer Installation:**

1. Remove the existing lockset
2. Clean up any splintered wood or bent metal
3. Slide Door Reinforcer over lock cut-out
4. Re-install lockset

**Tip:** M.A.G. Door Reinforcers can also be used as templates for installation of locksets as well.

How often do you see a beautiful door deteriorate from repetitive use? Kick marks at the bottom of the door (*see photograph 5*) or paw prints on the side (*see photograph 6*) are common unsightly occurrences.

Another metal base solution is the new or retrofit installation of kick and push plates. Whether it is fixing a door that has not been protected, or completing a new installation with preventative accessories, you will find your best result can be as simple as a metal application. A brass kick plate will hide those unsightly shoe marks and add a lasting beauty to the door. (*See photograph 7.*)

All M.A.G. kickplates and push plates are made in the USA from solid material that will match many of the standard door trim finishes. (*See photograph 8.*)

So remember, whether it is before the wear or after the tear, think metal for your solution. They are easy to install, inexpensive, and are available to match almost any standard hardware finish.

*For more information on M.A.G. products contact them at: (800) 624-9942 or (714) 891-5100; Fax: (714) 892-6845; E-mail: [mageng@mindspring.com](mailto:mageng@mindspring.com); Web: [www.magsecurity.com](http://www.magsecurity.com).*

# The Lighter Side

## The Wild About Harry



by Sara Probasco

**D**oes your life, like mine, run according to a yearly month-at-a-glance calendar book? Nearly everywhere I go, it goes, and when time comes to start afresh on a new book, I file the old one away as a sort of diary of things past. One of our insurance agents got me started back in the dark ages and has continued to send me a book every year. I now have a whole file drawer of them, recording decades of my past. On New Year's Day each year, I transfer important dates and other "permanent" information from the old book into the new.

"What are you doing?" Don asked, watching me making entries in my calendar book.

"Writing all the birthdays in my calendar book, so I won't forget anyone this year. You know, I forget, from year to year, how many holidays there are."

"Yeah. By the time we get over New Year's it's Valentine's, then Easter, and the Fourth of July. It's always something," he replied flatly.

"That's just the tip of the iceberg, dear heart. In addition to New Year's we also have Martin Luther King Day, in January. Then, in February, there's Lincoln's birthday, St. Valentine's Day, the Chinese New Year, and Washington's birthday. In March, Orthodox Lent begins, and we have Ash Wednesday and St. Patrick's Day," I continued, reading the fine print on my calendar. "April brings us Palm Sunday, Good Friday, Passover, and Easter, along with Professional Secretaries Day. May contains Mother's Day and Memorial Day. And those are only the ones marked in red."

"What about May first – May Day?"

"There's nothing here about that."

Don's eyes glazed over. "I remember when school kids used to

have special athletic field-day programs and dance around a May pole weaving long colored streamers in and out, 'til they were all balled up around the base of the pole. Then they'd try to get untangled enough to unweave everything and get back to square one.

I looked at him suspiciously. "That must have been before my time."

"Russia's May-Day military-might parades put a squelch on it, back during the cold war."

"No doubt. At any rate, as I was saying," I continued, "June hosts Flag Day and Father's Day. July's only holiday is Independence Day, but I suppose that's enough."

"Didn't we go through all this before, a few years back?" Don asked, returning to his newspaper. "Probably. The point is, nobody ever seems to do anything about it, and the number of holidays keep increasing. Hmmm. That's strange. There are still no holidays at all in August. Doesn't that strike you as peculiar?"

"Too many people go on vacation then. They wouldn't want to miss out on anything."

"Maybe. Then there's Labor Day in September and the beginning of Rosh Hashanah. In October, it's Yom Kippur, Columbus Day, United Nations Day, and Halloween. The first holiday listed in November is Election Day, which I never consider to be a holiday at all. Then there's Veteran's Day, Thanksgiving Day, and my birthday."

"That's not in there," Don said.

"Sure it is."

"Show me," Don said, rising to take a look.

"See. I just wrote it in. I wanted to see if you were paying attention," I said, smiling. "Let's see now, where was I? Oh, yes, then we wind up the year with

Chanukah and Christmas, and start all over again with the new year."

"Some list!"

"Thirty holidays, in all – not counting my birthday. Fifteen are religious observations, if you count Thanksgiving and Halloween, both of which began that way. Eleven are, for the most part, political, nine are Christian in origin, six are Jewish, two are clearly commercial in nature, and then there are the American and the Chinese New Year's observances."

"You didn't mention Mother-in-law-day or Step-grandparents'-day, or Save-the-whale-day."

"I'm happy to say, my calendar hasn't gotten around to listing such recent additions to the commercial scene, yet."

"It's still quite a list." Don returned to his newspaper.

"Wouldn't it be nice if we had a holiday when all the locksmiths in the country – or even in the world – could close shop and get away for a long weekend?" I contemplated the blank square that was August for a few minutes, before an idea took hold. "We should commandeer August for a security-related holiday."

"I heard somebody's already promoting 'Home Safety Month' in October."

"But take a look at the calendar." I pointed to the page in question. "In October, they're competing with Yom Kippur, Columbus Day, United Nations Day, and Halloween, while August," I said, flipping back two pages, "is wide open. We've already established that's when most people take off for a vacation. What better time to make them security conscious? Just think what would happen if all the locksmiths closed their stores for the same long-weekend in August and disappeared. The public might realize just how much they need us, if there wasn't a

locksmith available anywhere in the country.”

“Hmmm. Didn’t you talk about this idea several years ago?”

“Yeah, but nobody listened. Maybe they will now.”

“You may have something there,” Don admitted, laying his paper down. “We could launch a massive advertising campaign. ‘When planning your summer vacation, remember how important a quality deadbolt can be to your home security, while you’re away. Don’t leave home without it.’”

“A lot of schools start in August. We could sponsor programs during the first week of classes, and teach children about basic security in the home,” I suggested.

“They could learn about some of the greats in the lock and key industry: people like Lynus Yale and Leonard Singer,” Don injected, getting into the spirit of things. “Besides that, don’t overlook the commercial implications of such a promotion.” Dollar signs lit his eyes. “Why not establish a nationwide network of locksmiths, like florists have done? Call it TeleLock,” he said, describing a banner in the air

with his hands. “People could dial 1-800 to send security baskets filled with deadbolts, door alarms, key rings, pepper spray to friends and loved ones everywhere.”

“And think of the potential for greeting cards! ‘I love you in the morning, I love you late at night. This card is to remind you to lock up when you turn out the light.’”

Don stared at me a moment with a sick twist to his mouth. “We may want to work on that.”

“How about this one: ‘To discourage unwanted intrusions and to keep a thief at bay, have your present door locks all re-keyed, and install deadbolts today. Call A-1.’”

“Sounds like the old Burma Shave ads. Maybe something simpler, like, ‘For birthdays or anniversaries, say “I love you” with a gift of security from A-1 Lock & Key?’”

Ignoring him, I allowed my creative mind to pursue other prospects.

“I can see all kinds of possibilities. We could encourage everyone to wear little locks and keys on chains around their necks or as earrings or lapel pins. There’s potential for a whole new branch of the industry.”

“A parade!” Don said excitedly. “We’d have to have a parade, with floats, and bands, and huge balloons. We could even crown a beauty queen Miss New Key of the Year.”

Continuing to contemplate various aspects of the idea, we each drifted off in silence. Suddenly, I was brought back to reality.

“There is one problem,” I said. “What are the chances of locksmiths across the country participating? A lot of them around here don’t even show up for the annual association party where there’s free food. Can you imagine the problems involved in trying to organize nationwide participation in a week-end shut-down?”

“That’s no problem,” Don said. “You just send out notices to all the locksmiths that on such-and-such a week-end a delegate from their area locksmith association will be dropping by to sign them up to serve on a committee and pick up their donation. They’ll close up shop and disappear so fast, folks will think they’re Harry Potter!”

TNL

## The Ultimate Technitips Collection



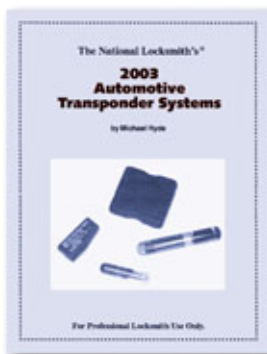
Here’s one of the most useful books ever available to the locksmith!

CLICK HERE TO LEARN MORE



#TIPS - 2

## 2003 Automotive Transponder Systems



CLICK HERE TO LEARN MORE



#TS - 2003

# Pin Kit

by  
Dale W. Libby, CMS



# UPGRADE

I am like many working safe-crackers, in that I am also a licensed and working locksmith. Thus, not only do I have to carry safecracking equipment, I also have to have a full line of locks, locksmithing tools, and pin kits. I have made a modification to my basic .005 and .003 thousandths pin kits that may help you work faster and easier.

Before going into the meat of the article, I would like to tell you that there are two basic types of locksmiths. I am the second type. The first would be of an obsessive, compulsive

nature. The second type would be more free and easy with his ways of dealing with the problems of locksmithing and safecracking. A perfect blend of both types is what most people are, and I believe is best. Now let us explore this mania of pin kits.

First and foremost, the .005-inch pin kit came into being. This is the one I have used the most and have keyed from with over 40-years of learned habits and finger placements. Next came the .003-inch pin kits to make the cut keys turn even easier, but a new numbering system of .003

increments had to be learned. In addition to these kits there were specialty kits for pinning a specific type of lock, say for instance Sargent, Russwin, or Corbin. If you had a big job with only one type of cylinder, you would either use a specialty kit or make one up of your own. The .003-inch pin kits also made you stock a larger number of pins than the old .005-inch kits did.

I still use the .005 kits. Old 40-year habits die hard.

Here is one distinguishing difference between the two types of locksmiths. Say for example, you accidentally tipped over one of your larger pinning kits. What would you do? I would sweep or vacuum up all the pins and throw them away and buy new packaged pins to put into the kit. Sometimes, buying all new pins for an empty pinning kit is more expensive than buying a new, fully loaded kit. Sorting a box of mixed up pins is not for me.

The second person to have this tragedy happen might gather up all the pins, sort them by color, and then sort them by size. In my opinion this is a colossal waste of time and energy. I have seen locksmiths do this very thing. What have they saved? A few bucks, while they wasted time and exhausted their eyesight. Perhaps this might be a learning experience for younger locksmiths, but it is a great time and energy waster.

Pin kits have progressed over the years. A standard .005 pin kit is shown in *photograph 1*. It has bottom pins on the lengths from .165 to as long as .365. In the bottom tray (which is held locked by two removable screw bolts) there is a tray with top or master pins. These pins are used to master key a lock cylinder.



1. Standard Color Coded .005-inch pin kit.



2. Bottom tray with small Master Pins first.



3. Modified bottom row numbered 0 – 9.

The first modification I made to my first .005-inch pin kit was to reverse the bottom pin tray, put the pulls and the tray stops on the opposite sides of the wooden tray. When I pulled out the tray, the smaller pins were the first ones out. These are the one's that I used mostly. The only minor problem was that the numbers for the pins were upside down. This was a small inconvenience to pay for having the smaller pins available without having to pull the bottom tray completely out.

*Photograph 2*, shows the bottom tray on a newer ESP Kolor Koded .005 pin kit. When you pull out this tray, it does start with the smaller master pins and even has a place for springs. This is a vast improvement over the way it was before. Above the bottom tray can be seen the last row of pins tray cups on the upper tray. They are empty. I vacuumed all these pins out of the holders for my idea to work.

I noticed many years ago that the pin lengths of .315 to .365 were not used much by me. I know that some Russwin, Corbin, Sargent Special, and even some Weiser locks used these longer pins, but I avoided using them in setting up my systems and my change keys. A deeper cut on a key weakens that key so I tend to avoid using pins longer than .300-inch or Schalte #9 depths. If I ever need a long bottom pin, I can always use a top and bottom pin combination to key.

Aha, an idea popped into my head. This initiative can be used on both the .003 and .005 pin kits. I removed all the pins from the bottom row of my .005-inch pin kit and threw them away. I then put labels from 0 to 9 across the bottom

of the pin kit and filled them in with Schlage pins corresponding to the numbered wooden cups. 0 = .165, 1 = .180 etc. through 9 = .300. I now had a specialty pin kit combined with my regular pin kit. Now I could key Schlage cylinders quicker and easier without having the added burden of a separate Schlage pin kit to contend with.

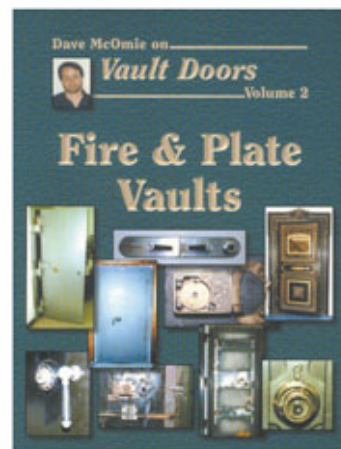
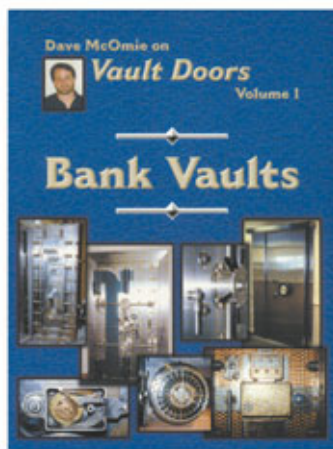
An added bonus was also having the regular pin kit available to key other locks. The .003-inch pin kit

that I have has about 21 pin cups across the bottom. In this kit I have my Schlage pins and my Kwikset pins in ascending order across the bottom. Another reason that I use the .005 pin kit is that the pin cups are larger and it is easier to get my fingers in to grab one pin.

I have always picked up pins with my fat fingers. Most customers are amazed that I can do this. I have seen other locksmiths that only use pin tweezers to pick up pins. There is really no wrong or right way to do this. I just find it faster and easier (for me) to use my fingers, and my modified pin 'specialty' kit.

**M**ost locksmiths I have shown this simple modification to, make a similar adjustment to one or all their kits. I used Schlage for my example, for that is the key cylinder that I key most, for both commercial and residential customers in the northern part of Illinois that I work and live in. In your part of the country other named key systems may be more popular. So, modify your pin kits and make your keying easier, faster, and more productive. Modify and Prosper. **TNL**

## Dave McOmie on Vault Doors Vol. 1 & 2



CLICK HERE TO LEARN MORE





# THE CASH STATION

by Mark Daniel

## LeFebure EL 1000

### **SPEC SHEET:**

**Depository Manufacturer:**  
LeFebure

**Depository Model #:**  
EL 1000

**Safe Manufactured by:**  
LeFebure

**Safe Size:**  
19-1/2" High by 14" Wide

**Handle Type:**  
Locking T-Handle

**Handle Location:**  
9-1/2" Down from top door & 2-5/8" Left from  
opening edge.

**Handle Rotation:**  
Counter-Clockwise to open

**Dial Location:**  
4-5/8" Down from top of door & 7" Left of opening  
edge.

**Number of Door Locking Bolts:**  
3

**Door Locking Bolt :**  
Top bolt is 3-5/8" Left of opening edge, Bottom bolt  
is 1-5/8" left of opening edge and the center bolt is  
rotating & is on center with the T-Handle.

**Door Locking Bolt Diameter:**  
1/4"

**Door Thickness to Bolt Center:**  
1-1/4"

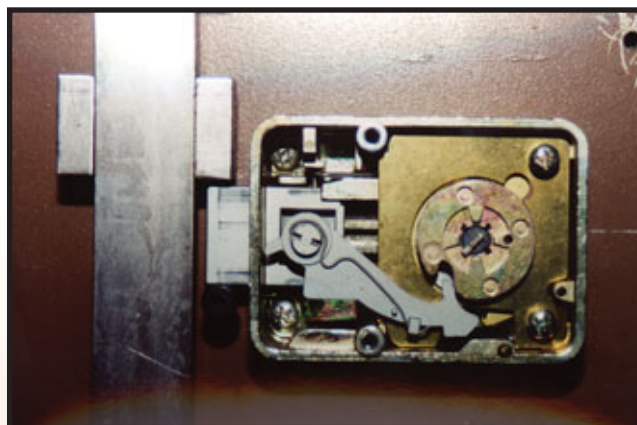
**Door Thickness to Lock Case:**  
1/2"

**Door Thickness to Back of Lock:**  
1-5/8"





## LeFabure El 1000



### **Combination Lock Opening Procedures:**

4 times left to first number. 3 times right to second number. 2 times left to third number. 1 time right to open.

### **Combination Lock Drill Point:**

7/8" out from dial center at 47. Align wheel gates at the fence lever. Note: Lower dial ring screw hole is drilled all the way through to the lock case. Makes a nice drill spot.

### **Combination Lock Relock Trigger Type:**

Spring wire. Activated when the lock cover is removed or punched.

### **Combination Lock Changing Procedures:**

Dial the existing combination to the opening index. Insert change key into back of lock and turn counter-clockwise one half turn. Dial new combination to opening index using same procedure as opening lock. Turn change key clockwise one half turn and remove. Test combination.

### **External Relock Device Type:**

None

### **External Relock Device Drill Point:**

N/A

### **Time Lock Manufacturer:**

N/A

### **Special Notes:**

The lower bolt screw comes loose and falls out, preventing the retraction of the bolt. Since this is a wall mounted depository, and extends out from the wall about 6". A good sharp blow on the bottom of the safe, in the area of the lower bolt, will move the bolt enough to pull open the door. Don't forget to put some thread locking compound on the bolt screws, it will prevent an unwanted comeback.

### **Combination Lock Type:**

LaGard 3330

### **Combination Lock UL Rating:**

Group 2

### **Combination Lock Case Thickness:**

1-1/8"

### **Number of Wheels:**

3

### **Driver Location:**

Rear

### **Combination Lock Handing:**

Left Hand (L.H.)

### **Combination Driver Location:**

Rear

### **Drop-In Location:**

48

### **Forbidden Zone:**

0 - 20



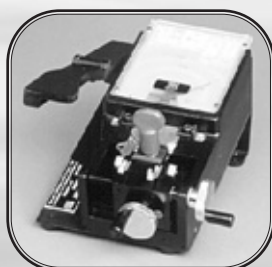
# TECHNITIPS

## YEAR-END PRIZES



### **Grand Prize**

Silca Bravo Duplicator



### **1st Prize**

HPC's 1200PCH  
Punch Machine



### **2nd Prize**

Mas Hamilton's  
PowerLever 2000



### **3rd Prize**

Curtis 2200 Duplicator



### **4th Prize**

SDC Magnetic Lock,  
Keypad and Exit Switch



### **5th Prize**

Securitron 12-Volt Unlatch Plug in  
Trans & Touchpad Retail Value \$650



### **6th Prize**

LaGard "SmartGard"



### **7th Prize**

Detex Advantex



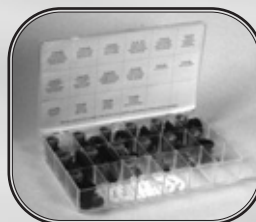
### **8th Prize**

Arrow 400 Series Alarmed  
Exit Device & S-75 Mounting  
Plate Kit for Narrow Stile  
Aluminum Doors



### **9th Prize**

\$500 in BWD Products



### **10th Prize**

\$500 in ASP Auto Locks



### **11th Prize**

\$500 in Strattec Auto Products



### **12th Prize**

Tech-Train "Jiffy Jack"



### **13th Prize**

Sargent & Greenleaf 6120  
Electronic Safe Lock



### **14th Prize**

High Tech Tools  
2000 Pro Set



### **15th Prize**

Slide Lock's Complete Z-Tool System



**16th Prize**

ESP Products Sampler



**17th Prize**

Major Manufacturing's  
HIT-111 Drill Guide



**18th Prize**

Abus Padlock's Marine  
Padlock Display (\$120 Retail)



**19th Prize**

MBA USA, Inc.  
Falle Pick Set



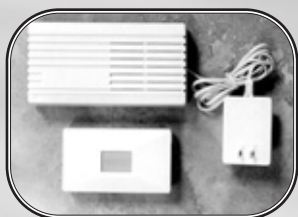
**20th Prize**

Baxter JV-1 & JV-5  
Code Books



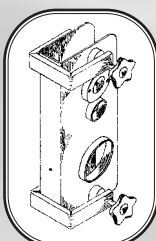
**21st Prize**

Sieveking Products  
Squeeze Play



**22nd Prize**

Rodann's RV500 Wireless  
Door Annunciator System



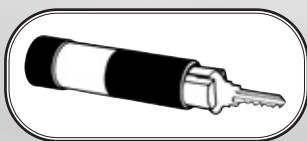
**23rd Prize**

A-1 Security Manufacturing  
Installation Jig



**24th Prize**

Keedex Sampler



**25th Prize**

Framon  
Impressioning  
Handle



**26th Prize**

Gator Tool Multi-Purpose  
Facecap Tool

These Prizes  
Awarded Each  
Month!

- **BWD Automotive Ford or GM KwiKit**
- **Wedgeco™ Key Extractor Kit**
- **Strattec Racing Jacket**
- **HPC Air Wedge™**
- **Sargent And Greenleaf 4400 Series Safe Deposit Box Lock**
- **A-1 Security Products**
- **ILCO Key Blanks (100 Blanks)**
- **Keedex "SPIN OUT"**
- **Screwdriver**
- **Tech Train Training Video**
- **Sieveking Products Gm E-Z Wheel Puller**
- **Major Manufacturing Products**
- **Slide Lock's "Z" Tool Opening Set**
- **The Sieveking Auto Key Guide**
- **Jet Key Blanks (100 Blanks)**
- **High Tech Tools**
- **LaGard Combo Guard**

Send in your tips, and win!

**How To Enter**

Send a tip on how to do any aspect of locksmithing. Certainly, you have a favorite way of doing something that you would like to share with other locksmiths. Write your tip down and send it to:

Jake Jakubowski, Technitips Editor,  
The National Locksmith  
1533 Burgundy Parkway  
Streamwood, IL 60107-1861

Or send your tips via  
E-mail to: Natlock@aol.com

**Rules & Regulations**

Each tip submitted must include your full name, street address (no P.O. Box numbers), city, state, zip code, phone number, fax number and e-mail address. **When sending tips via e-mail make sure to include complete address and phone.**

**Every Tip Published Wins**

If your tip is published you will win one of the monthly prizes listed. At the end of the year, we choose winners from all the monthly tips published, that will be awarded one of the fabulous year end prizes. All you have to do to win is enter.

Prizes are arranged according to suggested retail price value.

Tips Start  
on Next Page



**BWD KWIKIT WINNER:  
 Ford Five Pin  
 Ignition Trick**

Just a reminder about the problem that Ford 5 pin ignition locks have with the soft brass key buzzer breaking and jamming the keyway. Most of the time they can be extracted with picks or broken key removal tools.

In case you can't get the broken piece out, you can try grinding back the tip of the key and using it to turn the ignition for removal and replacement. Make sure you leave enough of an angle on the tip of the key to allow it to slide in easily.

You may have to first manipulate the broken piece of the buzzer the rest of the way down the keyway into the back of the lock and tap it flat by inserting a keyblank and tapping on the bow of the key with a small hammer. If that doesn't work (like the one I recently encountered) another alternative is to grind the tip of a keyblank back and then prep it for impressioning and impression a key to turn the cylinder. This lock had two problems: the customer's key was worn, and he had difficulty getting it to work even before the key buzzer broke.

As usual, I found this out after spending some time on the lock. Remember, a thorough questioning of the customer about the events leading up to a problem can sometimes reveal valuable information to the diagnosis of the problem, especially if there are multiple problems involved in the lock failure.

*William Kimbley  
 California*



**WEDGECO KEY  
 EXTRACTOR  
 WINNER:  
 Pin Torx Trick**

I was about 35 miles from the shop and needed a Pin-Torx bit to remove a security screw in a lock. As luck would have it, I had mislaid my Pin-Torx bit somewhere and had only standard Torx bits in my toolbox.

I tried drilling a hole in the end of a Torx bit, but that proved unsatisfactory. Then I decided to cut a slot across the face of the bit wide enough and deep enough to accommodate the pin. It worked like a charm and saved me a long round-trip back to town.

*Clarence White  
 Illinois*

## A Few Words From Jake...



**by Jake  
 Jakubowski**

I've been known, on occasion, to share a tip of mine with you all. It's only fair, since so many of you folks have been willing to share your tips with me and all those who read this column.

This month I'm going to give you two tips. The first one is that I have invented, and am producing a patent pending universal, retrofitable toilet stall latch. Say, what? Yes, you read it right. Let me ask you a question. I don't know if you have ever been asked to, or have tried to repair or replace a toilet stall locking latch, but if you have you know the difficulty in trying to find a replacement. If your experience has been anything like mine, you can't do it. Not a retrofit anyway. If you can identify the manufacturer of the hardware, you stand a pretty good chance of getting what you need. Otherwise, you can put a hook and eye on it or a small slide bolt. Neither of which is satisfactory.

Well, I have invented an honest-to-goodness, universal, retrofitable toilet stall latch that will fit virtually any configuration of toilet stall doors! It's called Johnny Latch by Jake, and you can learn all about it at: <http://www.johnnylatch.com>.

My second tip is almost too simple to mention.

Have you ever gone up to a door with a panic device on it and found that not only has the device been mounted and remounted or replaced, but there are all sorts of holes drilled in the door (especially metal doors) where the mounting hardware has been moved? The holes are unsightly and make the whole installation or repair look unprofessional.

If the holes are just screw holes, drill them out to accept a 3/16" PopRivit® and put a rivet in the hole to "cover" it. If the hole is a bolt hole, drill the hole all the way through the door and put a "sex" bolt in the hole with a finish washer on the inside. Some holes in aluminum stile doors can be repaired using a 1/4-20 screws or bolts with a chrome finish washer.

Whatever you do, it makes the job look a little neater and a lot more professional.

See y'all next month.



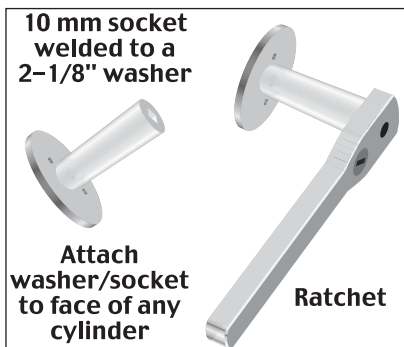
**STRATTEC WINNER:  
 Cylinder Removal  
 Tool**

On a recent lockout, I wanted to remove a Medeco cylinder from a Segal 667 lock. I figured that I could remove the cylinder ring, grip the cylinder with my Vise-Grips and

rock the cylinder back and forth until the retaining screws broke. However, when I removed the cylinder ring, I found that the cylinder was flush against the lock and there was not enough room for me to grab the cylinder with my Vise-Grips.

After finally getting the door open, I decided to see if there was not an easier way to force a cylinder out of auxiliary style locks in situations where normal procedures would not work. I came up with the following device, which I think works well and is easy to fabricate.

I had a 10mm socket welded to a 2-1/8" flat washer. (See illustration A.) Before welding the washer to the socket, I drilled two holes in the washer (use any mortise or deadbolt cylinder to determine the location of



**Illustration A.**

those holes) that would accept self-tapping screws.

Now, all I need to do is attach the flat washer to the face of a cylinder with two self-tapping screws, put a ratchet (or breaker bar) on the socket and rock the cylinder back and forth until the retaining screws break. If you need more leverage, you can use a small length of pipe on the handle of the ratchet.

Michael Maldonado  
New York



HPC WINNER:  
**Weiser Knob Trick**

I came across an old Weiser knoblock that when I picked the lock, it would not open. I hadn't seen one of these in a while so it took me a couple of minutes to remember this trick.

After you pick the lock (it only turns clockwise) you have to turn the cylinder almost back to the locked position. Slide a straight pick or wire into the center of the keyway until you feel the spring loaded rod and push it in as you turn the cylinder clockwise to open.

This doesn't unlock the knob, it only retracts the deadlatch, so you have to push, or pull, the door as you do this. These locks are designed so that the key tip pushes the center rod back. If you are picking the lock, the rod does not get pushed back and it won't retract the deadlatch.

You also have to be careful when picking. My rake pick kept getting trapped in the back of the cylinder and I had to push the rod in with a straight pick to release it.

Marvin Durant  
North Carolina



SARGENT &  
GREENLEAF  
WINNER:  
**Master Padlock  
Code**

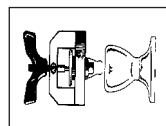
A customer needed the combination for a Master padlock. This was the style with a key bypass and I could not find a code for it. I picked the bypass cylinder on the back to open the lock.

I then held the locking dog back so I could get a better view of the wheels. With some light, I could see the gate on the wheels at about the 10 o'clock position. I dialed the gates to that point and marked down the number on the dial. I had another

similar padlock with the back off and calculated the proper numbers for opening. You subtract 11 from the previous numbers found and the lock should open.

Depending on your view of the wheels, you may have to adjust 1 number up or down. If you can only see two wheels, these will most likely be the first two numbers. You can find the last number by dialing one number at a time, after dialing the first two properly.

Jim Pakkala  
Michigan



A-1 SECURITY  
PRODUCTS  
WINNER:  
**Rekeying a  
Stanley  
Keylocking Hasp**

I have a couple of simple tools that I made to aid in rekeying the Stanley Keylocking Hasp. The tools assist me in removing the plug from the cylinder to expedite rekeying.

As you can see in *illustration B*, I make a small hook in a straightened paper clip and then make a larger loop at the other end to act as a handle for turning and

# Wafer Lock Reading



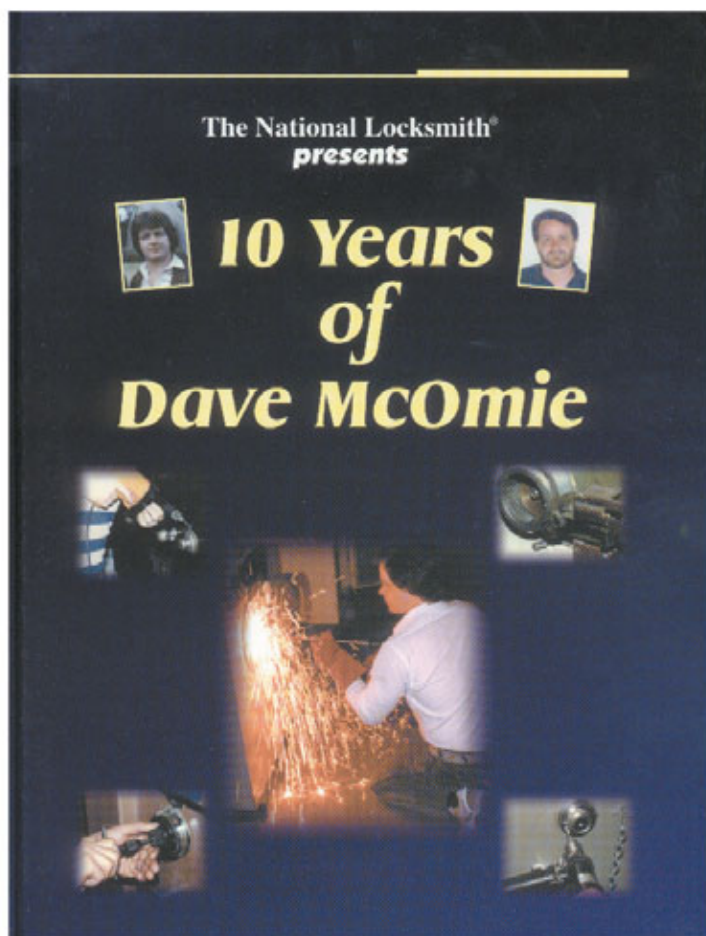
Easy to learn.  
No Codes needed.

CLICK HERE TO LEARN MORE

#WLR - 1



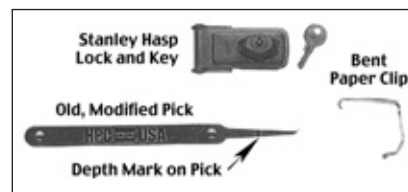
# 10 Years of Dave McOmie



Every single National Locksmith article by  
Dave McOmie from August 1986  
through August 1996  
under one cover!

[CLICK HERE TO LEARN MORE](#)

#DM - 10



**Illustration B.**

pulling. I used a broken HPC pick, with the end ground as shown to enable it to grab the retaining wafer and manipulate it so the plug can be removed.

Insert the pick 5/8" into the plug, with the hook turned to the left and "work" the retainer wafer down to the release position. Then, insert the paper clip, place the hook behind the plug and pull.

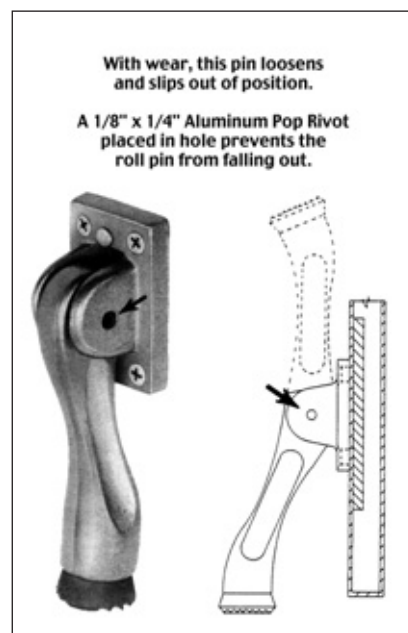
I found it helps expedite matters if you mark the pick as shown, 5/8" back from the tip.

It may take a time or two to get the hang of removing these plugs, but it really is easy to do.

*Todd A. Phillips  
Michigan*



I work for a school district in New York State and we have had a chronic problem with kick down door holders falling apart after a short while on the door. Of course, those holders get a lot of use and abuse, but it seems that after a while, the roll pin that holds the leg of the



**Illustration C.**

holder in the bracket loosens and falls out which allows the leg to fall off and then get lost.

To rectify the problem, I place a 1/8" x 1/4" Pop-Rivit in the same hole as the roll pin. (See illustration C.) I place one of these rivets on both sides of the kick down holder. The rivet prevents the roll pin from coming out regardless of how loose it may become.

Jeffrey Sibley, CPL  
New York



KEEDEKX WINNER:

### Deadbolt Drilling Jig

Having been faced with the necessity to drill a deadbolt off the door because of a failed bolt latching mechanism, I developed this simple to make jig to aid in quickly removing broken deadbolts.

I used an old Schlage B160 deadbolt housing. Where the retaining screws are threaded into the outside cylinder housing, I simply used a 5/32" bit to completely drill through the face of the old cylinder. Then I removed the scalp and the plug.

Now when I encounter a deadbolt that requires drilling, I simply mount my homemade jig face-to-face with the broken deadbolt, use an awl to scribe my drill site and then drill away.

By removing the plug from the cylinder that I'm going to use as a jig, it allows me to fit the jig flat against the cylinder that I want to drill. I've found this effective on Schlage, Arrow and Kwikset.

Mike Moriarity  
Florida

Editor's Note: Mike, thanks for your tip. Here's another one for you to consider. Use the retaining plate from a rim cylinder and place the plate face to face with the defective deadbolt or other rim cylinder. Simply start your drill marks where the rim cylinder mounting screws would normally pass through the plate. Use a 1/4" drill to allow for any "wiggle" room you might need to shear the mounting screws.

TECH-TRAIN  
TRAINING VIDEO  
WINNER:

### Valiant Key Origination

A customer brought in a 1964 Plymouth Valiant with a sidebar trunk lock to have a key made. I thought about impressioning or going through the back seat because it had no glove compartment lock. Upon researching the specifications, I found that it was like the older GM sidebar locks with the same spacing and only a few thousandths difference in depth. I checked out the keyway profiles and found that it was similar to the GM "H" keyway.

I decided to use my GM tryout keys and in less than ten minutes I had the trunk open. All I had to do was code cut a key and I was finished.

Robert Coleman  
Illinois



SIEVEKING  
PRODUCTS GM E-  
Z WHEEL PULLER  
WINNER:  
**Keeping Track of  
the Oddballs**

I've been locksmithing for about twenty-five years now, and it seems as if a week can't go by without someone bringing me in something that I've never seen before.

A long time ago, I decided to start keeping track of all those oddball items and have found that I keep referring back to my oddball file to find a solution to a problem a customer has just laid on my service counter.

I purchased a binder and a packet of business card holder pages. These pages have ten plastic pockets that will hold twenty business cards back-to-back (in my case, front-to-front).

Every time I originate, duplicate or see an odd or unusual item, I write down the information on the back of a business card and slip it into my binder. The card may contain blanks used, spacing, depths, configuration or any modifications I had to make.

Occasionally, I will even make an extra blank and slip it into the pocket with the card. This little trick has come in handy many, many times. I have made a key for a Kraco Electronic Nightstick on at least three occasions and simply duped the key from the one in my oddball file.

If I come across an unusual or different lock, I write down whatever information I have. That way, I'm at least aware that the lock exists.

My Oddball Binder has been a great asset to me over the years as one of my most utilized reference guides.

Elain Willhoite  
California

MAJOR  
MANUFACTURING  
PRODUCTS  
WINNER:  
**Vent Window  
Opening Tool**



If you remove the bail from the master cylinder in an older salvaged car, you will find that the bail is perfectly formed to open vent windows. One end will work on the left side and the other end will open the right side, by releasing the button and turning the handle at the same time.

Marvin Golden



## 15 Minute Safe Opening



CLICK HERE TO LEARN MORE



# The 2001 HONDA CBR1100XX



by  
John Blankenship

## Part 2



**L**ast month we covered the gas cap lock and ignition lock. This month we conclude with the seat lock and spec information.

### Seat Lock



**1. To disassemble the seat lock, pick it 90 degrees clockwise and hold it while you lift the rear of the seat. Have a small screwdriver ready to finish turning the lock, because you are turning against spring pressure. It will return to the locked position when released.**



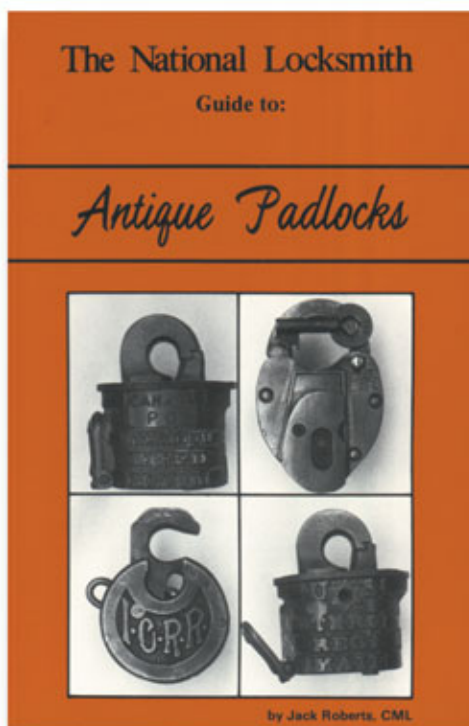
**2. The rear of the seat has been lifted up. Now pull it toward the rear of the motorcycle and remove it. Make sure the seat lock and latch are working properly before putting the seat back on, or you will be unable to remove it again without damage.**



**3. Use a 5mm hex key to remove the front bolt from the rear fairing. Then remove its counterpart on the other side of the motorcycle. You can see the bolts you are removing from the rear fairing in photograph 1.**



**4. Use a 6mm hex key to remove the center bolt from the rear fairing. Then remove its counterpart on the other side of the motorcycle.**



# Antique Padlocks

Finally there is a book to give you all the information you need about old interesting locks.

[CLICK HERE TO LEARN MORE](#)





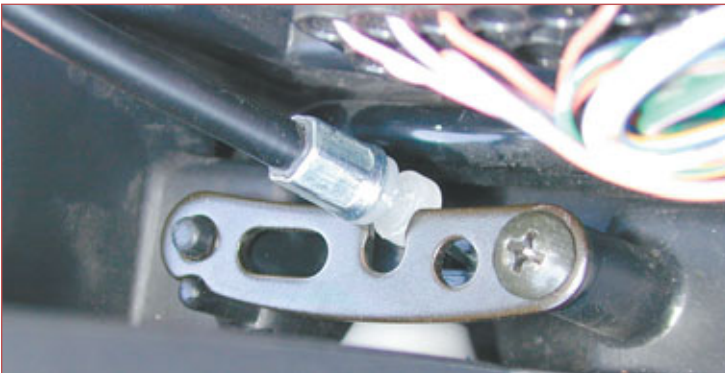
**5. Use a 6mm hex key to remove the larger bolt from the grab handle. Pull the rubber cover off the smaller bolt and use a 5mm hex key to remove it from the grab handle. Then remove their counterparts from the other side of the motorcycle. You can now remove the grab handle and also pull the rear fairing toward the rear of the motorcycle and remove it.**



**6. The rear fairing has been removed from the motorcycle.**



**7. Remove the two 10mm bolts that hold the taillight on. Then move the taillight to the right side of the motorcycle to get it out of the way. It is not necessary to disconnect the wiring.**



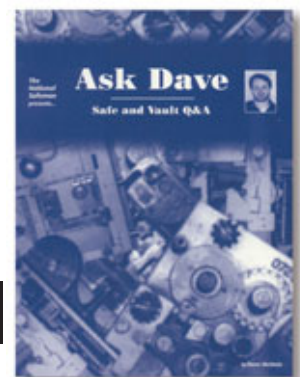
**8. This photograph shows the area at the rear of the seat lock. Pop the end of the seat latch cable housing out of its mounting bracket as shown. Then remove the Phillips screw and mounting bracket.**

## Ask Dave

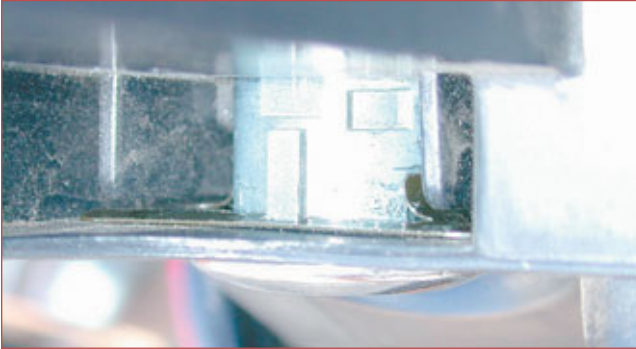
You asked. He answered. This is safe and vault Q&A with an attitude.



[CLICK HERE TO LEARN MORE](#)



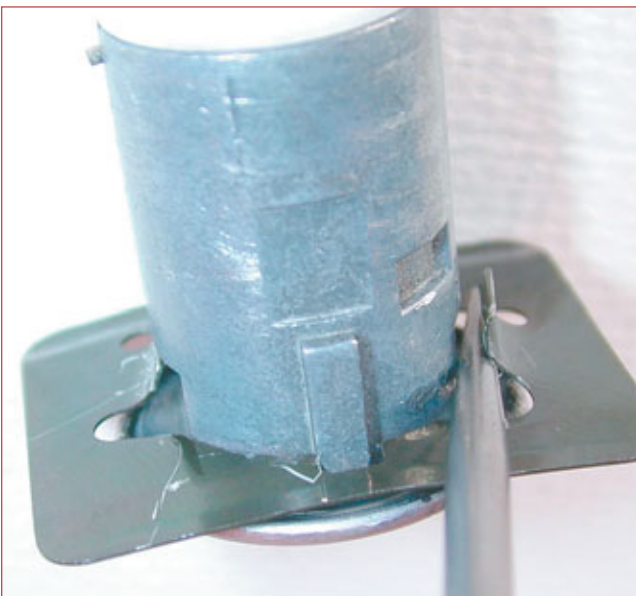
#AD - 1



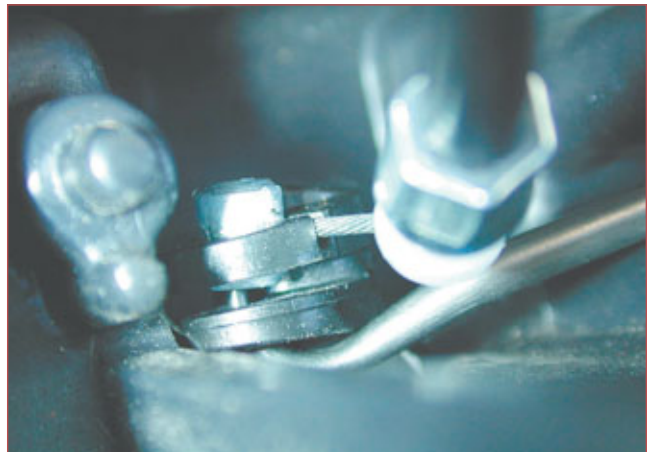
**9. We are looking down at the top of the seat lock. A clip is securing the lock and you cannot pull it out. There are two tabs on the clip that snap into two flat spots on the lock housing.**



**10. Use two awls to move the tabs outward so you can pull the lock out.**



**11. The lock and clip have been removed for demonstration purposes. An awl has been pushed in to move one of the tabs out. The increasing diameter of the awl will move the tab outward. It is necessary to move both tabs out to remove the lock. When replacing the lock, use the awl to push the tabs back down until they snap into place. Notice the land on top of the lock housing. Pull the lock out far enough to clear the land from its slot in the mounting hole and turn the whole lock 90 degrees counterclockwise.**



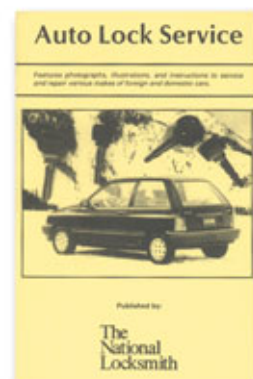
**12. Move the seat lock cable around until it aligns with the slot in the tailpiece. Then use a hook tool to help push it out of the tailpiece. You can now pull the lock out and remove it from the motorcycle.**

## Auto Lock Service

Covers opening and service techniques.

[CLICK HERE TO LEARN MORE](#)

#ALS - 1



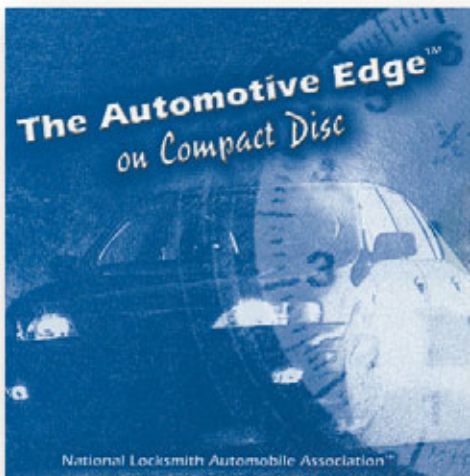


**13. The seat lock has been removed from the motorcycle. Notice that a roll pin secures the plastic tailpiece to the rear of the lock.**



**15. The face cap has to be removed. This cap is easy to remove and replace without damage. I use a pair of spring-returned needle nose pliers with one side ground 1/16" shorter and slightly pointed to pry up the edge of the cap. You only need to pry it up about 2/3 the way around to slide the cap off.**

**14. Insert a wire into the roll pin to keep it from collapsing. Drill a small hole next to the roll pin and then pry it out with a nail set or similar tool so you can pull the tailpiece off the rear of the lock.**



# AutoEdge

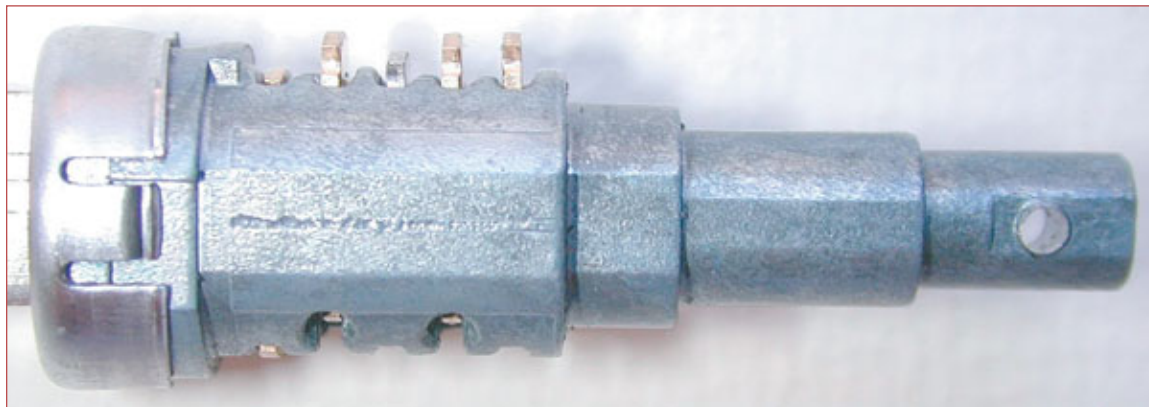
This CD contains over 1,200 pages of automotive locksmith service.

[CLICK HERE TO LEARN MORE](#)

#AE - CD



**16. Now you can disassemble the lock as shown.**



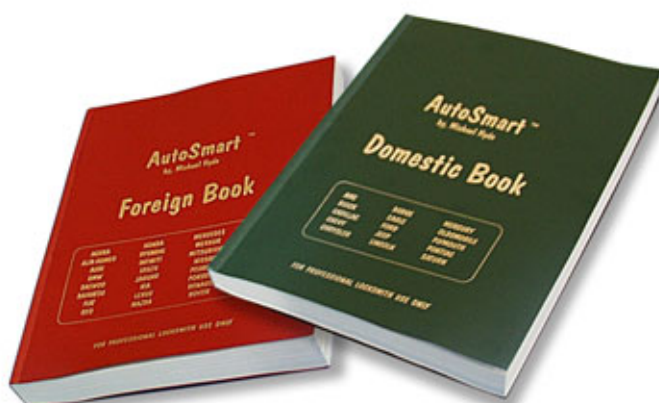
**17. The seat lock contains wafer tumblers in spaces 2-6. An X265 blank inserted into the keyway shows that the cuts are 1 3 2 3 3. A search using key code**

**software revealed that there are only 6 codes that use those cuts in spaces 2-6. It is easy to progression the missing cuts because the first space is always a #1 depth (no cut) so you really don't have to be concerned about it; you only need to progression spaces 7-8. There are only three depths so there are only nine possible combinations to try:**

**1st try: 11, 12, 13, 23, 33; 2nd try: 21, 31, 32; 3rd try: 22**

**Use the gas cap lock for progressing these cuts and you can use one side of a blank for each try, since all of the tumblers are on the same side of the keyway in the gas cap lock.**

## AutoSmart™



With almost 900 pages these are the only books you need to service virtually EVERY car on the road!



[CLICK HERE TO LEARN MORE](#)

**18. I use a small ball peen hammer to crimp the facecap back on. I support the other side of the lock against a vice and vary the angle of the hammer as I slide it across the workbench into the edge of the facecap.**



### Specifications

**Codes:** J, K, L, M, N, P, Q, R, S, T00-99, U00-U39

**Blank:**

**Ilco:** X265 (HD109)

**Curtis:** HD109

**Silca:** HON63FP

**Jet:**

**HPC Card Number:** CF73

**ITL Number:** 211

**Curtis:** HD-13 cam & HD-13A carriage

**Tumbler Locations:** 1 2 3 4 5 6 7 8

Ignition

x x x x x x x

Gas Cap

x x x x x

Seat

x x x x x



**Spacing:**

1 = .098

2 = .197

3 = .295

4 = .394

5 = .492

6 = .591

7 = .689

8 = .787

**Depths:**

1 = .276

2 = .244

3 = .213



## AutoSmart Advisor

Contains virtually every car and part known to man up through 2000.

[CLICK HERE TO LEARN MORE](#)



#ASA - 2002

# BUSINESS BRIEFS

## Strattec Names New Vice-President

Strattec Security Corporation has announced the appointment of Mr. Kris Pfahler as Vice President, Marketing and Sales.

Mr. Pfahler is responsible for all sales and marketing efforts for Strattec, including the company's six Product and Customer Business Teams.

## Dugmore and Duncan

Dugmore and Duncan now offers the revolutionary new SARGENT 11-line T-Zone lockset. The T-Zone lockset withstands extreme abuse and far exceeds ANSI/BHMA Grade 1 requirements, with numerous key systems available



The new design eliminates lever sag, even after 2 million cycles and has a 45-degree lever rotation for full latch retraction. There are four solid seamless cast lever designs. The T-Zone lockset fits standard 161 prep-no thru bolt, retrofits bored-in locks and has 17 functions available.

For more information call: (888) DUG-MORE (384-6673). Circle 265 on Rapid Reply.

## Access, Adams Rite, Von Duprin and Sargent

Access Hardware Supply is offering The Rite Door® from Adams Rite Manufacturing Company, the Von Duprin Model 5100 strike and the Sargent electrified products.



Von Duprin 5100 Strike.



Adam's Rite Integrated Door System

The Rite Door is a complete door and exit device, integrated to perform flawlessly and to install quickly. All hardware, including their world-class exit device, is pre-installed in the door at Adams Rite, to assure perfect alignment and function.

Von Duprin's 5100 model strike is an easy-to-install electric strike that was created for medium duty applications, specifically to control traffic flow through openings in retail and commercial environments. Every strike comes standard with three separate faceplates to cover wood, hollow metal or aluminum frames.

Sargents 8200 and 10 Lines of electromechanical mortise and cylindrical locks are available in a number of configurations, to cover different functions and applications. They are well suited for high security areas. A battery-operated Keypad Mortise Lockset is also offered, capable of storing up to 99 individual codes along with the master code.

For more info call: (800) 348-2263 or visit their web site at

[www.accesshardware.com](http://www.accesshardware.com). Circle 266 on Rapid Reply.

## Ex-Coach Bears His Soul

The Door and Hardware Institute (DHI) will hold its 27th Annual Convention and Exposition in Chicago, July 13-15, 2002 at Navy Pier. One of the most unforgettable events of this three-day convention will undoubtedly be the "No Huddle" Lunch on Saturday, July 13, from 11:30 a.m. to 1:30 p.m., at the Hyatt Regency Chicago during a break in DHI's education programs. The reason being: Big, Bad Mike Ditka!

To access complete details on the "No Huddle" Lunch and DHI 2002, including registration and lodging, log onto the Institute's website at: [www.dhi.org](http://www.dhi.org), or simply call DHI at: (703) 222-2010.

## Dorma Hires Ciastko

Dorma Group North America has hired Mari Ciastko as Architectural Products Consultant. She will work primarily with architects to develop functional and aesthetic solutions for entryways through the specification and use of door hardware, automatic and revolving doors, and glass wall systems.



Mari Ciastko

Mari is based in Chicago. Her office number is (312) 337-7833. For more information about Dorma, call: (800) 523-8483 or visit [www.dorma-usa.com](http://www.dorma-usa.com).

## U.S. Lock Corporation

Interline Brands has named Geoffrey Meyer general manager of U.S. Lock, a full service distributor of architectural, security hardware and



locksmith supplies. U.S. Lock currently has six locations nationwide serving the needs of the professional wholesale security industry. Meyer's primary responsibilities include business development, strategic planning and the profitability of the company.

TNL

# FREE Code Cards!

from The National Locksmith®

COLLECT 'EM ALL!!

Spaces		Depths		Cutter: CW-1011		IC #: 903	
mm	Inch	mm	Inch	Jaw: A	Series	Original	
1	2150	846	2	855	337	50000-69999	
2	2010	791	1	820	323		
3	1800	709	3	690	272		
4	1660	654	4	625	246		
5	1450	571					
6	1310	516					
7	1100	433					
8	960	378					
9	750	295					
10	610	240					

Align: Black horse shoe tip stop

For the exclusive use of the registered purchaser of InstaCode named below.  
Duplication or distribution of this material to anyone other than the registered purchaser is prohibited by law.

**The National Locksmith®**

Key Blank Mfr. Blank #  
Silca TOY43AT4

**Toyota 50001-69999**

**InstaCode**

Copyright 1994 - 2001  
WH Software

Cut Along Outside of Card and Laminate To Use

Spaces		Depths		Punch		IC #: P903	
mm	Inch	mm	Inch	Jaw: A	Series	Original	
1	2150	846	2	855	337	50000-69999	
2	2010	791	1	820	323		
3	1800	709	3	690	272		
4	1660	654	4	625	246		
5	1450	571					
6	1310	516					
7	1100	433					
8	960	378					
9	750	295					
10	610	240					

Align: Tip stop (Left Insertion)

For the exclusive use of the registered purchaser of InstaCode named below.  
Duplication or distribution of this material to anyone other than the registered purchaser is prohibited by law.

**The National Locksmith®**

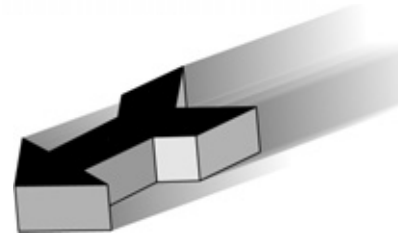
Key Blank Mfr. Blank #  
Silca TOY43AT4

Insert key such that face of jaw meets key profile

**Toyota 50001-69999**

**InstaCode**

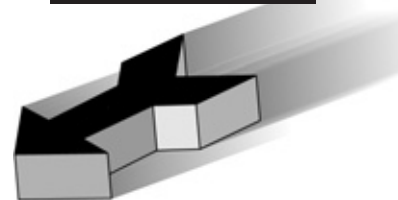
Copyright 1994 - 2001  
WH Software



## BONUS Code Card

For the 1200CMB™

Flip 'em over for  
Silca,  
Curtis,  
Framon,  
A-1  
and  
ITL specs!



## Code Card

For the 1200PCH™

Courtesy of  
INSTA-CODE 2002™ from  
The National Locksmith

Toyota 50001-69999

HPC 1200CMB™

HPC: N/A      Cutter: CW-1011  
Vice: A

Silca Unocode

UnoCode Card No.: 1420  
Vice/Adapter V100 Standard

HPC Codemax™

DSD: N/A  
Jaw: A  
Cutter: 1011

Curtis

Cam Set: N/A  
Carriage: N/A  
Clipper: N/A

Framon

Cuts Start At: 404      Cutter: N/A  
Spacing: .0551 / .0826 Alternating  
Block #: N/A      Depth Increment: .0255  
Key Clamping: Key aligned using left side of vice

A-1 Pak-A-Punch™

Quick Change Kit: N/A  
Punch And Die: N/A

ITL

ITL Manufacturer ID: N/A

Toyota 50001-69999

HPC 1200PCH™

HPC: N/A      Punch: N/A  
Jaw: N/A

Silca Unocode

UnoCode Card No.: 1420  
Vice/Adapter V100 Standard

HPC Codemax™

DSD: N/A  
Jaw: A  
Cutter: 1011

Curtis

Cam Set: N/A  
Carriage: N/A  
Clipper: N/A

Framon

Cuts Start At: 404      Cutter: N/A  
Spacing: .0551 / .0826 Alternating  
Block #: N/A      Depth Increment: .0255  
Key Clamping: Key aligned using left side of vice

A-1 Pak-A-Punch™

Quick Change Kit: N/A  
Punch And Die: N/A

ITL

ITL Manufacturer ID: N/A

# KEY CODES

## Toyota, Part 3 50001-69999

**Manufacturer:** Toyota  
**Code Series:** 50001 - 69999

**Key Blanks:**

**Silca:** TOY43AT4

**Number of Cuts:** 10

**M.A.C.S.:** 2

**Key Gauged:** Tip

**Cut to Cut Spacings:**

.0551/.0826 Alternating

**Cut Depth Increments:** .0255

**Spacings (Framon):**

1 - .404

2 - .459

3 - .541

4 - .596

5 - .679

6 - .734

7 - .816

8 - .871

9 - .954

10 - 1.009

**Depths:**

1 = .325

2 = .299

3 = .274

4 = .248

**HPC 1200CMB**

**Code Card:** N/A

**Jaw:** A

**Cutter:** CW-1011

**Gauge From:** Tip

**HPC 1200PCH (Punch):**

**PCH Card:** N/A

**Punch:** N/A

**Jaw:** A

**Silca UnoCode**

**Card Number:** 1420

**HPC CodeMax**

**DSD #:** N/A

**Jaw:** A

**Cutter:** CW-1011

**Curtis No. 15 Code Cutter**

**Cam-Set:** N/A

**Carriage:** N/A

**Framon #2**

**Cuts Start at:** .404

**Cut to Cut Spacing:**

.0551/.0826 Alternating

**Block #:** N/A

**Depth Increments:** .0255

**Cutter:** N/A

**Key Clamping Info:** Key aligned  
using left side of vise/spacing  
clip.

**A-1 Pack-A-Punch**

**Quick Change Kit:** N/A

**Punch:** N/A

**Die:** N/A

**ITL 9000 & 950**

**Manufacturer ID:** N/A

**ECM 200**

N/A



54701 1223234423

54702 4323234421

54703 3423234344

54704 3223234343

54705 2223234334

54706 1223234332

54707 4323234322

54708 3323234321

54709 3223234312

54710 2323234311

54711 2223234344

54712 1223234343

54713 4323234332

54714 3223234323

54715 2323234322

54716 2123234321

54717 1123233344

54718 3423233312

54719 2323233311

54720 2223233244

54721 1223233243

54722 4323233232

54723 2323233223

54724 3323233221

54725 2323233212

54726 2123233211

54727 1223233244

54728 4323232334

54729 3223232332

54730 2123232321

54731 1123232312

54732 4323232244

54733 3323232243

54734 2323232234

54735 3323232221

54736 1123232134

54737 3423232132

54738 3223232123

54739 3423232121

54740 3223232112

54741 2223232111

54742 2123231244

54743 1223231243

54744 1123231234

54745 3423231221

54746 3223231134

54747 2323231132

54748 2223231121

54749 1223224423

54750 1123224343

54751 3423224444

54752 3323224443

54753 3223224344

54754 2323224323

54755 3323224321

54756 2323224344

54757 2123224343

54758 1123224322

54759 3423224323

54760 1123224322

54761 3423224334

54762 1123224312

54763 3423224313

54764 3223224313

54765 3423224312

54766 3223224312

54767 2223213444

54768 2123213434

54769 1223213423

54770 4323213421

54771 3423213344

54772 3323213312

54773 3223213244

54774 2323213243

54775 2123213232

54776 1223212344

54777 1123212334

54778 3423212311

54779 3323212244

54780 2323212243

54781 1223212234

54782 1123212134

54783 4323212132

54784 3323212144

54785 3223212143

54786 2323212134

54787 2223211134

54788 2123211132

54789 1223124443

54790 1123124434

54791 4323124423

54792 3423124422

54793 3223124421

54794 2323124344

54795 2223124343

54796 2123124334

54797 1123124333

54798 4323124323

54799 3423124322

54800 3223124321

54801 3223124312

54802 2223124311

54803 2123123444

54804 1223123443

54805 1123123434

54806 4323123423

54807 3423123422

54808 3223123421

54809 2323123444

54810 2123123243

54811 1123123334

54812 3423123321

54813 3323123312

54814 3223123311

54815 2323123244

54816 2223123243

54817 2123123234

54818 1123123233

54819 3423123223

54820 1123123222

54821 3423123212

54822 3223123211

54823 2323122344

54824 2223122343

54825 2123122334

54826 1123122332

54827 3423122312

54828 3223122311

54829 2323122244

54830 1223122242

54831 4323122232

54832 2123122134

54833 1223122133

54834 4323122123

54835 3323121244

54836 3223121243

54837 2323121234

54838 2123121232

54839 1223121134

54840 1123121132

54841 4323113443

54842 3423113434

54843 3323113432

54844 3223113423

54845 2323113422

54846 2223113421

54847 2123113344

54848 1123113343

54849 3423113332

54850 3223113321

54851 2323113312

54852 2223113311

54853 1223113244

54854 1123113243

54855 4323113233

54856 3323113232

54857 3223113223

54858 2323113222

54859 2123113221

54860 1223113212

54861 1123112344

54862 4323112334

54863 3423112332

54864 3223112321

54865 3223112312

54866 2323112244

54867 2223112243

54868 2123112234

54869 1123112232

54870 4323112133

54871 3423112132

54872 3323112123

54873 3223111244

54874 2323111243

54875 2223111234

54876 2123111232

54877 1122444343

54878 3422444343

54879 3222444343

54880 2122444343

54881 1122444342

54882 3422444343

54883 3222444332

54884 2122444324

54885 1122444324

54886 3422444312

54887 3222444311

54888 2122444224

54889 1122444214

54890 3422444213

54891 3222444212

54892 2122444443

54893 1122444434

54894 3422444423

54895 3222444422

54896 2122444421

54897 1122444344

54898 3422444334

# Toyota, Part 3

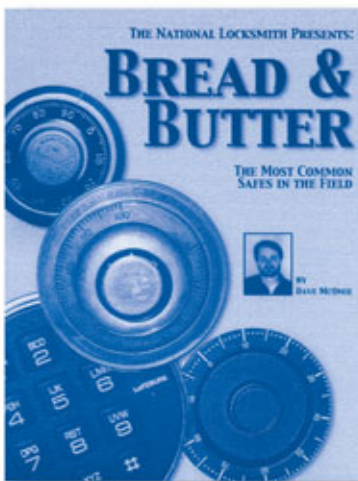
## 50001-69999

54959	1122334343	55033	3422113421	55107	2221334322	55181	2321322344	55255	4321211244	55329	4312433221
54960	3422333444	55034	3222113344	55108	2121334321	55182	2221322343	55256	3421211243	55330	3212433212
54961	2322333434	55035	2122113312	55109	1221334312	55183	2121322334	55257	3321211234	55331	2212433211
54962	1122333423	55036	1122113244	55110	1121334311	55184	1121322332	55258	3221124423	55332	1212432344
54963	3422333421	55037	3422113232	55111	4321333443	55185	3421322312	55259	2321124343	55333	4312432334
54964	3222333244	55038	3222112344	55112	3221333434	55186	3221322311	55260	2221124312	55334	3212432332
54965	1222333243	55039	2122112334	55113	2221333432	55187	2321322244	55261	2121123444	55335	2212432321
54966	3422332312	55040	1122112244	55114	1221333423	55188	1221322243	55262	1221123434	55336	1212432312
54967	3222332311	55041	3422112234	55115	1121333422	55189	4321322232	55263	1121123423	55337	4312432244
54968	2122332243	55042	3222112134	55116	4321333244	55190	2121322134	55264	3421123421	55338	3212432243
54969	1122332134	55043	2122112133	55117	3421333243	55191	1221322133	55265	3321123344	55339	2212432234
54970	3322332132	55044	1122111244	55118	2321333234	55192	4321322123	55266	3221123312	55340	1112432232
54971	2322332121	55045	3422111234	55119	2121333232	55193	3321321244	55267	2321123244	55341	33212432134
54972	1222331243	55046	3221344434	55120	1121333223	55194	3221321243	55268	2221123243	55342	2212432133
54973	4322324423	55047	2321344432	55121	3421333221	55195	2321321234	55269	1221123232	55343	1212432132
54974	3322324343	55048	2221344423	55122	3321333212	55196	2121321232	55270	1121122344	55344	4312432122
54975	2322324312	55049	2121344422	55123	3221333211	55197	1221321134	55271	4321122244	55345	2312432121
54976	1222323444	55050	1221344421	55124	2321332344	55198	1121321132	55272	3321122243	55346	2112432112
54977	4322323434	55051	1121344344	55125	2121332343	55199	4321234343	55273	2321122234	55347	1112431244
54978	3322323423	55052	4321344334	55126	1121332334	55200	3421234312	55274	2121122134	55348	3312431234
54979	3422323421	55053	3421344333	55127	3421332321	55201	3321233444	55275	1221122133	55349	2312431232
54980	3322323344	55054	3221344332	55128	3321332312	55202	3221233434	55276	1121121243	55350	2112431221
54981	2122323343	55055	2321344323	55129	3221332311	55203	2321233423	55277	4321113434	55351	1112431134
54982	1122323312	55056	2221344322	55130	2321332244	55204	2121233422	55278	3421113423	55352	3312344423
54983	3422323243	55057	2121344321	55131	2221332243	55205	1221233421	55279	3321113422	55353	2312344343
54984	1122323232	55058	1221344312	55132	2121332234	55206	1121233344	55280	3221113344	55354	2112344312
54985	3422323234	55059	1121344311	55133	1121332232	55207	4321233244	55281	2321113244	55355	1112343434
54986	1122322312	55060	4321343443	55134	3421332134	55208	3421233243	55282	2221113243	55356	3312343422
54987	3422322244	55061	3421343434	55135	3221332133	55209	3321233232	55283	2121113232	55357	2312343421
54988	1122322234	55062	3321343432	55136	2321332132	55210	2321232312	55284	1221112344	55358	2112343312
54989	3422322133	55063	3221343423	55137	2221332123	55211	2121232311	55285	1121112334	55359	1112343244
54990	1122322132	55064	2321343422	55138	1221332122	55212	1121232243	55286	4321112243	55360	3312343232
54991	3422322132	55065	2221343421	55139	1121332121	55213	3421232133	55287	3421112234	55361	2312343212
54992	2322234423	55066	2121343344	55140	4321331244	55214	3421232132	55288	3212444343	55362	2112342311
54993	3422234312	55067	1121343343	55141	3421331243	55215	3221231243	55289	2212444312	55363	1112342243
54994	1122233444	55068	3421343332	55142	3321331234	55216	2321231132	55290	1212443434	55364	3312342133
54995	2322233423	55069	3221343321	55143	3221331232	55217	2121224423	55291	4312443422	55365	2312342132
54996	2322233421	55070	2321343312	55144	2321331221	55218	1221224343	55292	3212443421	55366	2112342121
54997	3422233312	55071	2221343311	55145	2221331134	55219	4321223444	55293	2212443312	55367	1112334423
54998	1122233244	55072	2121343244	55146	2121331132	55220	3421223434	55294	1212443244	55368	3212334312
54999	1122233232	55073	1221343243	55147	1221324443	55221	3321223423	55295	4312443232	55369	2312334444
55000	1122232311	55074	1121343234	55148	1121324434	55222	4321223421	55296	3212442312	55370	1112333434
55001	1122232134	55075	3421343232	55149	4321324423	55223	3321223344	55297	2212442311	55371	3212333422
55002	1122232132	55076	3321343223	55150	3421324422	55224	3221223312	55298	1212442243	55372	2212333421
55003	2322231132	55077	3221343222	55151	3221324421	55225	2121223244	55299	4312442133	55373	1212332444
55004	3422213434	55078	2221343221	55152	2321324344	55226	1121223243	55300	3212442132	55374	3212333232
55005	1122213423	55079	2121343212	55153	2221324343	55227	2121222344	55301	2212442121	55375	2212332312
55006	1122213421	55080	1221343211	55154	2121324334	55228	1121222334	55302	1212434443	55376	1212332311
55007	2322213312	55081	1121342344	55155	1121324333	55229	3421222133	55303	4312434332	55377	4312332134
55008	3422213243	55082	4321342334	55156	4321324323	55230	3221221243	55304	3212434423	55378	2312332133
55009	3422212344	55083	3421342332	55157	3421324322	55231	2221213444	55305	2212434422	55379	2112332132
55010	1122212334	55084	3321342321	55158	3221324321	55232	2121213443	55306	1212434421	55380	1112332121
55011	3422212234	55085	3221342312	55159	2321324312	55233	1221213434	55307	4312434343	55381	3312331132
55012	3422212133	55086	2321342311	55160	2221324311	55234	1121213432	55308	3212434334	55382	2312324423
55013	1122211244	55087	2221342244	55161	2121323444	55235	4321213422	55309	2112434333	55383	2112324343
55014	2322211234	55088	2121342243	55162	1221323443	55236	3321213421	55310	1112434332	55384	1112324312
55015	3422124423	55089	1221342234	55163	1121323434	55237	3221213344	55311	3312434322	55385	3312323434
55016	3222124343	55090	4321342221	55164	4321323423	55238	2321213343	55312	2312434321	55386	2312323423
55017	2122124312	55091	3321342134	55165	3421323422	55239	2221213334	55313	2112434312	55387	1212323422
55018	1122123444	55092	3221342133	55166	3221323421	55240	2121213332	55314	1112434311	55388	4312323344
55019	3422123423	55093	2321342132	55167	2321323344	55241	1221213321	55315	3312433443	55389	3212323312
55020	1122123422	55094	2221342123	55168	2121323343	55242	1121213312	55316	2312433434	55390	2212323244
55021	3422123344	55095	1221342122	55169	1121323334	55243	4321213243	55317	2112433432	55391	1212323243
55022	3222123312	55096	1121342121	55170	3421323321	55244	3421213234	55318	1112433423	55392	3312322344
55023	2122123244	55097	4321334443	55171	3321323312	55245	3321213233	55319	3312433421	55393	2312322343
55024	1122123243	55098	3421334434	55172	3221323311	55246	3221213232	55320	2312433344	55394	2112322334
55025	2122122344	55099	3321334432	55173	2321323244	55247	2121213223	55321	1212433343	55395	4312322311
55026	1122122334	55100	3221334423	55174	2221323243	55248	1221212344	55322	4312433312	55396	3212322244
55027	3422122234	55101	2321334422	55175	2121323234	55249	1121212343	55323	3212433311	55397	1212322243
55028	1122122134	55102	2221334421	55176	1121323233	55250	4321212332	55324	2212433244	55398	3312322134
55029	3422121243	55103	2121334344	55177	3421323223	55251	3321212244	55325	1212433243	55399	2312322133
55030	3222113444	55104	1121334343	55178	1121323222	55252	2321212243	55326	4312433233	55400	1212322132
55031	2122113434	55105	3421334332	55179	3421323212	55253	1221212234	55327	2312433232	55401	4312321132
55032	1122113423	55106	2321334323	55180	3221323211	55254	1121212134	55328	2112433223	55402	3212234423

## Toyota, Part 3 50001-69999

55403	2212234343	55437	3312212244	55471	2112122343	55505	2111333434	55539	2211323223	55613	3344332312
55404	1212234312	55438	2112212243	55472	1112122334	55506	3211333422	55540	3311323221	55614	1244332311
55405	4312233434	55439	4312212134	55473	3212122244	55507	2111333421	55541	2211323212	55615	2344332134
55406	3212233423	55440	3212212133	55474	1212122243	55508	3211333243	55542	4311322343	55616	3244332132
55407	2112233422	55441	2212211244	55475	3312122134	55509	1211333232	55543	2311322334	55617	3444331243
55408	1112233421	55442	1212211243	55476	2312122133	55510	3211333231	55544	1211322332	55618	2244331132
55409	3312233312	55443	4312124443	55477	2112121244	55511	21113332243	55545	3211322312	55619	3244324343
55410	2312233244	55444	3212124434	55478	1112121243	55512	3211332133	55546	2111322244	55620	3444323434
55411	2112233243	55445	2212124432	55479	3312113444	55513	2111332132	55547	3311322234	55621	2244323423
55412	4312232312	55446	1212124423	55480	2312113434	55514	3311331132	55548	2111322232	55622	3244323421
55413	2312232311	55447	3312124421	55481	2112113423	55515	2211324443	55549	3311322133	55623	3444323312
55414	1212232243	55448	2312124344	55482	1112113422	55516	4311324432	55550	2211322132	55624	2244323244
55415	4312232133	55449	2112124343	55483	3312113244	55517	2311324423	55551	3311321244	55625	2244323232
55416	3212232132	55450	1112124334	55484	2312113243	55518	1211324422	55552	2311321243	55626	3444322334
55417	2112231243	55451	3312124332	55485	2112113232	55519	3211324344	55553	1211321234	55627	2244322312
55418	1112231132	55452	2312124323	55486	1112112344	55520	2111324343	55554	3211321134	55628	3244322244
55419	3212224343	55453	1212124322	55487	3312112244	55521	3211324333	55555	2111234423	55629	3444322234
55420	2112224312	55454	4312124312	55488	2312112243	55522	2111324332	55556	3311234312	55630	2244322134
55421	1112223444	55455	3212123444	55489	2112112234	55523	3311324322	55557	2211233444	55631	3244322132
55422	3312223423	55456	2212123443	55490	4311344423	55524	2211324321	55558	4311233423	55632	3444321243
55423	3312223421	55457	1212123434	55491	2311344343	55525	4311324311	55559	2311233422	55633	2244321132
55424	2212223344	55458	4312123423	55492	1211344312	55526	2311323444	55560	1211233421	55634	3244234423
55425	1112223312	55459	3212123422	55493	3211343423	55527	1211323443	55561	3211233312	55635	3444234421
55426	3212223243	55460	2112123421	55494	2111343422	55528	3211323432	55562	2111233244	55636	2244234343
55427	3212221243	55461	1112123344	55495	3311343312	55529	2111323423	55563	3311233232	55637	2344234333
55428	2112213444	55462	3312123334	55496	2211343244	55530	3311323421	55564	2211232312	55638	3344234323
55429	1112213434	55463	2312123332	55497	4311343232	55531	2211323344	55565	4311232134	55639	1244234322
55430	3312213422	55464	2112123321	55498	2311342312	55532	3211323334	55566	2311232133	55640	2344234312
55431	2212213421	55465	1112123312	55499	1211342311	55533	1211323332	55567	1211232132	55641	3344233443
55432	1212213344	55466	3312123243	55500	3211342134	55534	3211323312	55568	3211224423	55642	1244233434
55433	4312213244	55467	2312123234	55501	2111342133	55535	2111323311	55569	2111224343	55643	2344233423
55434	3212213243	55468	2112123233	55502	3311334423	55536	3311323243	55570	3311223444	55644	3344233421
55435	2112213232	55469	4312123223	55503	2111334343	55537	2211323234	55571	2211223434	55645	1244233344
55436	1112212344	55470	2312122344	55504	3311333444	55538	3311323232	55572	4311223422	55646	2244233321

## Bread & Butter



Now here is one  
amazing value!

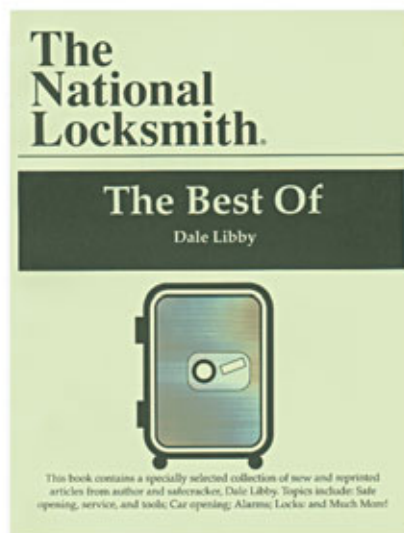
CLICK HERE TO LEARN MORE

#BB - 01

# Toyota, Part 3 50001-69999

55687	2244213243	55761	3443323232	55835	3443122334	55869	3234443232	55903	2334344311	55937	2233321243
55688	3244212344	55762	1243322344	55836	2243122332	55870	2234442312	55904	1234343443	55938	3344434423
55689	3444212312	55763	2243322312	55837	3243122312	55871	1234442311	55905	3234343432	55939	3344434312
55690	2244212311	55764	3243322244	55838	3443122244	55872	3434442134	55906	2134343423	55940	3344433423
55691	3244212243	55765	3443322234	55839	2243122243	55873	3234442133	55907	1134343422	55941	3344433421
55692	3444212134	55766	2243322134	55840	3243122232	55874	2234442132	55908	3234343344	55942	3344433312
55693	2244212133	55767	2343322132	55841	3343122133	55875	1234442121	55909	2134343321	55943	3344433244
55694	3244212121	55768	3343321243	55842	1243122132	55876	3434434343	55910	3434343311	55944	3344433232
55695	3444211243	55769	1243321132	55843	2343122122	55877	2334433412	55911	2334343244	55945	3344432344
55696	2244211234	55770	2243234343	55844	3243122112	55878	1234433434	55912	1234343243	55946	3344432312
55697	3244211132	55771	3243233444	55845	3443121243	55879	3334433422	55913	3234343232	55947	3344432244
55698	3443443423	55772	3243233423	55846	2243121234	55880	2334433421	55914	2134343223	55948	3344432232
55699	3243443422	55773	3243233421	55847	3243121221	55881	1234433344	55915	1134343222	55949	3344432133
55700	3243443312	55774	1243233344	55848	3443121132	55882	3234433311	55916	3334343212	55950	3344432122
55701	3443443232	55775	2243233244	55849	2243113444	55883	2234433244	55917	2334343211	55951	3344432112
55702	2243442312	55776	2243233232	55850	3243113434	55884	1134433243	55918	2134342344	55952	3344431132
55703	3243442243	55777	3243232311	55851	3443113423	55885	3234433221	55919	3434342334	55953	3344434343
55704	3443442133	55778	3443232134	55852	2243113422	55886	2234432312	55920	2234342332	55954	3344343244
55705	2243442132	55779	1243232133	55853	3243113344	55887	1234432311	55921	1234342321	55955	3344323444
55706	3243434432	55780	2343232121	55854	3343113312	55888	3434432134	55922	2233344312	55956	3344234434
55707	3443434422	55781	3343231132	55855	1243113244	55889	2334432133	55923	3433343421	55957	3344233444
55708	2243434421	55782	1243224423	55856	2343113232	55890	2134432132	55924	1233343244	55958	3344213444
55709	2243434334	55783	2343224312	55857	3343112334	55891	1134432122	55925	2233342311	55959	3343443434
55710	2243434323	55784	3343223434	55858	1243112312	55892	3334432112	55926	3433342134	55960	3343434443
55711	3243434321	55785	1243223423	55859	2343112244	55893	3234431243	55927	1233342132	55961	3343434344
55712	3443434311	55786	2243223421	55860	3343112234	55894	2134431132	55928	2233324423	55962	3334443434
55713	1243433443	55787	3243223312	55861	1243112134	55895	1134344432	55929	3433323444	55963	2234443244
55714	1243433432	55788	3443223243	55862	2343112132	55896	3334344422	55930	1233323422	55964	1134433444
55715	2243433422	55789	1243223232	55863	3343111243	55897	2334344421	55931	2233323244	55965	2334344344
55716	2343433344	55790	2343222334	55864	1243111234	55898	1234344343	55932	3433322312	55966	1234343444
55717	2343433312	55791	3243222311	55865	3334443422	55899	3234344332	55933	1233322311	55967	3232443444
55718	3243433244	55792	3443222133	55866	2334443421	55900	2134344323	55934	2233322243	55968	2243434333
55719	2343433234	55793	1243222132	55867	2134443312	55901	1134344322	55935	3433322134	55969	2234433233
55720	3243433223	55794	2243221243	55868	1134443243	55902	3334344312	55936	1233322132	55970	1234343343
55721	3443433221	55795	3243213444								
55722	2243433212	55796	3443213423								
55723	3243433244	55797	2243213422								
55724	3243432334	55798	3243213344								
55725	3343432321	55799	3443213244								
55726	1243432312	55800	2243213243								
55727	3243432244	55801	3243212344								
55728	3343432234	55802	3443212312								
55729	1243432232	55803	2243212311								
55730	2343432134	55804	3243212243								
55731	3243432132	55805	3443212134								
55732	3443432122	55806	2243212133								
55733	2243432121	55807	3243212121								
55734	3243432111	55808	3443211243								
55735	3443431243	55809	2243211234								
55736	2243431234	55810	3243211132								
55737	3243431221	55811	3443124434								
55738	3443431132	55812	2243124432								
55739	2243431121	55813	3243124422								
55740	2343344343	55814	3443124344								
55741	3243343434	55815	2243124343								
55742	3343343422	55816	2343124333								
55743	1243343421	55817	3343124323								
55744	2243343244	55818	1243124322								
55745	2243343232	55819	2343124312								
55746	3243342311	55820	3343123444								
55747	3443342134	55821	1243123443								
55748	1243342133	55822	2343123432								
55749	2343342121	55823	3343123422								
55750	2343334312	55824	1243123421								
55751	2343332311	55825	2243123343								
55752	2343332134	55826	2243123332								
55753	3243332121	55827	3243123312								
55754	3243331132	55828	3443123244								
55755	3443324343	55829	2243123243								
55756	1243324312	55830	2343123233								
55757	2243323434	55831	3343123223								
55758	2343323422	55832	3443123221								
55759	3243323344	55833	2243123212								
55760	3343323244	55834	3243122344								

## The Best of Dale Libby



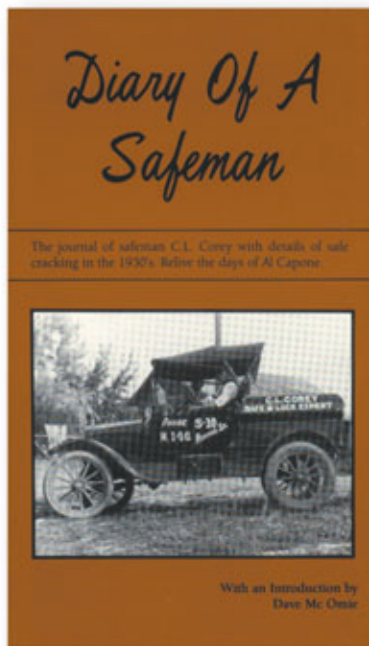
CLICK HERE TO LEARN MORE

#DALE

## Toyota, Part 3 50001-69999

55971	2234343233	55987	2233233312	56003	2134342243	56019	2334332312	56035	2334323312	56109	1134224421
55972	1234333434	55988	1233233232	56004	1234342234	56020	2134332311	56036	2234323244	56110	4334224343
55973	2234333232	55989	2233123343	56005	1134342232	56021	1134332243	56037	1234323243	56111	3434224334
55974	1234234333	55990	1233123332	56006	4334342134	56022	3434332132	56038	4334322344	56112	3234224333
55975	2233434343	55991	2232433343	56007	3434342133	56023	3234332122	56039	3434322334	56113	2334224332
55976	1233433423	55992	1232334343	56008	3234342132	56024	2334332121	56040	3234322312	56114	2234224323
55977	2233433311	55993	2232333423	56009	2334342123	56025	2234332112	56041	2334322311	56115	1234224322
55978	1233433232	55994	1232333232	56010	2234342122	56026	1234331243	56042	2234322244	56116	1134224321
55979	2233343434	55995	2232333343	56011	2134342121	56027	4334324423	56043	2134322243	56117	4334224311
55980	1233343312	55996	1232323332	56012	1234342112	56028	3434324343	56044	1234322234	56118	3434223444
55981	2233342133	55997	2223334343	56013	1134342111	56029	3234324312	56045	1134322134	56119	3334223443
55982	1233323434	55998	1223234333	56014	3434334312	56030	2334323444	56046	3434322132	56120	3234223434
55983	2233323312	55999	2221334333	56015	2334333444	56031	2134323434	56047	3334322121	56121	2334223432
55984	1233323232	56000	3234342312	56016	2134333422	56032	1134323423	56048	3234321243	56122	2234223423
55985	2233234343	56001	2334342311	56017	1134333421	56033	4334323421	56049	2334321132	56123	1234223422
55986	1233233434	56002	2234342244	56018	3434333221	56034	3434323344	56050	2234234443	56124	1134223421

## Diary Of A Safeman



This book is a real gem...the private safe diary of old time safecracker C.L. Corey.

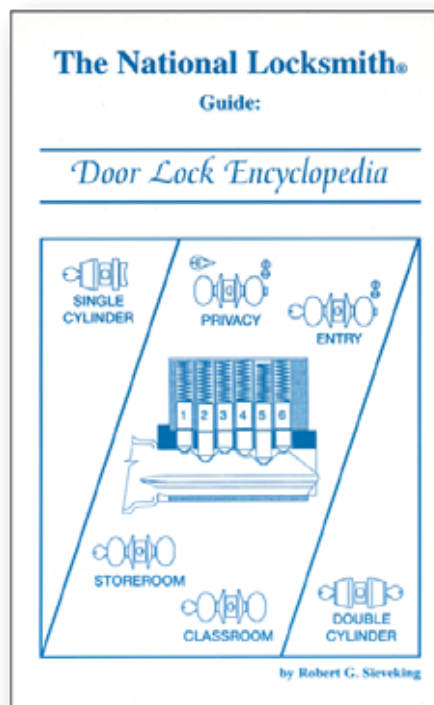
CLICK HERE TO LEARN MORE

#DIARY

## Toyota, Part 3 50001-69999

56183	4334212312	56257	1133222121	56331	1233113421	56345	2333111234	56359	3432443344	56373	3332443211
56184	3434212311	56258	3433221132	56332	4333113312	56346	2232444343	56360	3232443343	56374	3232442344
56185	3334212244	56259	2333213444	56333	3233113244	56347	2132444334	56361	2232443334	56375	2332442343
56186	3234212243	56260	2133213434	56334	2233113243	56348	1132444333	56362	1232443332	56376	2232442334
56187	2334212234	56261	1133213423	56335	1233113232	56349	4332444323	56363	1132443321	56377	2132442332
56188	2134212232	56262	3433213421	56336	4333112334	56350	3432444322	56364	4332443311	56378	1232442321
56189	1134212221	56263	2333213344	56337	3233112312	56351	3332444321	56365	3432443244	56379	1132442312
56190	4334212133	56264	2133213312	56338	2233112311	56352	3232444312	56366	3332443243	56380	4332442244
56191	3434212132	56265	1133213244	56339	1133112244	56353	2332444311	56367	3232443234	56381	3432442243
56192	3334212123	56266	3433213232	56340	3433112234	56354	2232443443	56368	2232443233	56382	3332442234
56193	3234212122	56267	2333212344	56341	2333112134	56355	2132443434	56369	2132443232	56383	3232442232
56194	2234212121	56268	2133212334	56342	2133112133	56356	1232443432	56370	1232443223	56384	2132442221
56195	2134212112	56269	1133212312	56343	1133112132	56357	1132443423	56371	4332443221	56385	1232442134
56196	1234211244	56270	3433212244	56344	3433111243	56358	4332443421	56372	3432443212	56386	1132442133
56197	1134211243	56271	2333212243								
56198	4334211232	56272	2133212234								
56199	3434211221	56273	1133212134								
56200	3334211134	56274	3433212132								
56201	3234211132	56275	2333212121								
56202	2233444343	56276	2133211244								
56203	1233444312	56277	1133211243								
56204	4333443423	56278	3433211134								
56205	3233443422	56279	2333211132								
56206	2233443421	56280	2133124443								
56207	1233443312	56281	1133124434								
56208	4333443243	56282	3433124423								
56209	3233443232	56283	2333124422								
56210	2233442312	56284	2133124421								
56211	1233442311	56285	1133124344								
56212	4333442134	56286	3433124334								
56213	3233442133	56287	2333124332								
56214	2233442132	56288	2133124323								
56215	1233442121	56289	1133124322								
56216	4333434312	56290	3433124312								
56217	3233433444	56291	2333124311								
56218	2233433422	56292	2133123444								
56219	1233433421	56293	1133123443								
56220	4333433221	56294	3433123432								
56221	3233432312	56295	2333123423								
56222	2233432311	56296	2133123422								
56223	1233432243	56297	1133123421								
56224	4333432132	56298	3433123321								
56225	3233432122	56299	2333123312								
56226	2233432121	56300	2133123311								
56227	1233432112	56301	1133123244								
56228	4333431132	56302	3433123234								
56229	3233234443	56303	2333123232								
56230	2233234423	56304	2133123223								
56231	1233234312	56305	4333123221								
56232	4333233422	56306	3233123212								
56233	3233233421	56307	2233123211								
56234	2233233244	56308	1233122344								
56235	1233232312	56309	4333122334								
56236	4333232243	56310	3233122332								
56237	3233232134	56311	2233122321								
56238	2233232132	56312	1233122312								
56239	1233232121	56313	4333122244								
56240	4333231132	56314	3233122243								
56241	3233224423	56315	2233122234								
56242	2233224343	56316	1133122232								
56243	1233224312	56317	3433122133								
56244	4333223434	56318	2333122132								
56245	3233223423	56319	2133122123								
56246	2133223422	56320	4333122121								
56247	1133223421	56321	3233122112								
56248	3433223312	56322	2233121244								
56249	2333223244	56323	1233121243								
56250	2133223243	56324	4333121232								
56251	4333222344	56325	3233121221								
56252	3233222334	56326	2233121134								
56253	2133222312	56327	1233121132								
56254	1133222311	56328	4333113434								
56255	3433222133	56329	3233113423								
56256	2333222132	56330	2233113422								

## Door Lock Encyclopedia



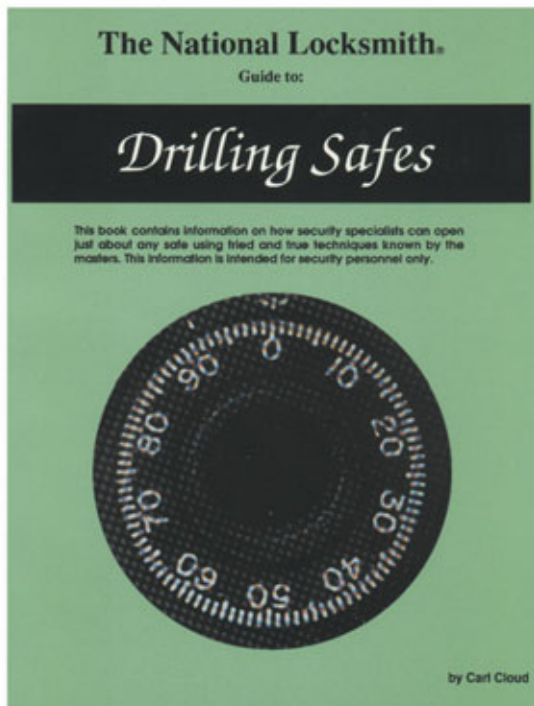
The ability to remove a lock from a door, disassemble the mechanism, and remove the lock cylinder for service is not always a simple straightforward task.

[CLICK HERE TO LEARN MORE](#)

#DLE

## Toyota, Part 3 50001-69999

56387	4332442123	56421	1232433211	56455	4332342312	56489	2332323432	56523	3332321121	56557	1232213422
56388	3432442122	56422	1132432344	56456	3432342311	56490	2132323423	56524	3232234423	56558	1132213421
56389	3232442121	56423	3432432334	56457	3332342243	56491	1132323422	56525	2232234343	56559	4332213312
56390	2332442112	56424	2332432332	56458	3232342134	56492	4332323344	56526	2132234312	56560	3432213244
56391	2232442111	56425	2232432321	56459	2232342133	56493	3232323321	56527	1232233444	56561	3332213243
56392	2132434443	56426	2132432312	56460	2132342132	56494	2232323312	56528	4332233423	56562	3232213232
56393	1232434434	56427	1232432311	56461	1232342121	56495	1232323311	56529	3332233422	56563	2232212344
56394	1132434432	56428	1132432244	56462	4332334423	56496	1132323244	56530	2332233421	56564	2132212334
56395	4332434422	56429	4332432234	56463	3232334312	56497	3432323234	56531	2132233344	56565	1132212312
56396	3432434421	56430	3432432232	56464	2232333444	56498	2332323232	56532	1132233312	56566	4332212244
56397	3332434344	56431	3232432221	56465	1232333422	56499	1132323223	56533	4332233243	56567	3332212243
56398	2332434343	56432	2232432134	56466	4332333244	56500	2132323221	56534	3232233232	56568	2332212234
56399	2132434334	56433	1232432133	56467	3232332312	56501	1132323212	56535	2132232312	56569	2132212134
56400	1132434332	56434	1132432132	56468	2232332311	56502	4332322344	56536	1232232311	56570	1232212133
56401	3432434322	56435	4332432122	56469	1232332243	56503	3432322343	56537	4332232134	56571	4332211244
56402	3332434321	56436	3332432121	56470	4332332132	56504	2332322334	56538	3432232133	56572	3432211243
56403	4332434312	56437	3232432112	56471	3332332121	56505	1232322332	56539	3232232132	56573	3332211234
56404	2332434311	56438	2332432111	56472	2332331243	56506	4332322312	56540	2132232121	56574	3232211134
56405	2232433444	56439	2232431244	56473	2132331132	56507	3332322311	56541	1232231243	56575	2332211132
56406	1232433443	56440	2132431243	56474	1232324443	56508	3232322244	56542	1132231132	56576	2232124423
56407	4332433432	56441	1232431234	56475	1132324434	56509	2132322243	56543	3432224343	56577	2132124343
56408	3232433423	56442	1132431232	56476	4332324423	56510	1132322234	56544	3332224312	56578	1232124312
56409	2332433422	56443	4332431134	56477	3432324422	56511	2232322134	56545	2332223444	56579	1132123444
56410	2232433421	56444	3432431132	56478	3232324421	56512	1232322133	56546	2232223434	56580	4332123423
56411	1232433344	56445	3332431121	56479	2332324344	56513	4332322123	56547	1232223423	56581	3432123422
56412	4332433312	56446	3232344423	56480	2132324343	56514	3332322122	56548	2332223421	56582	3232123421
56413	3232433311	56447	2232344343	56481	1132324334	56515	4332322112	56549	2132223344	56583	2332123344
56414	2332433324	56448	2132344312	56482	3432324323	56516	3332322111	56550	1132223312	56584	2232123312
56415	2132433243	56449	1132343434	56483	3232324322	56517	3232321244	56551	3432223243	56585	2132123244
56416	1132433234	56450	3432343422	56484	2232324321	56518	2332321243	56552	1132223232	56586	1232123243
56417	3432433223	56451	3332343421	56485	2132324312	56519	2232321234	56553	3432221132	56587	4332122344
56418	3232433222	56452	2332343312	56486	1232324311	56520	1232321232	56554	3232213444	56588	3432122334
56419	2232433221	56453	2232343244	56487	1132323444	56521	4332321134	56555	2332213434	56589	3332122312
56420	2132433212	56454	1232343243	56488	3432323434	56522	3432321132	56556	2232213423	56590	2332122311



## Drilling Safes

One of the most expert safemen in the country, Carl Cloud has written a very important book on safe opening.

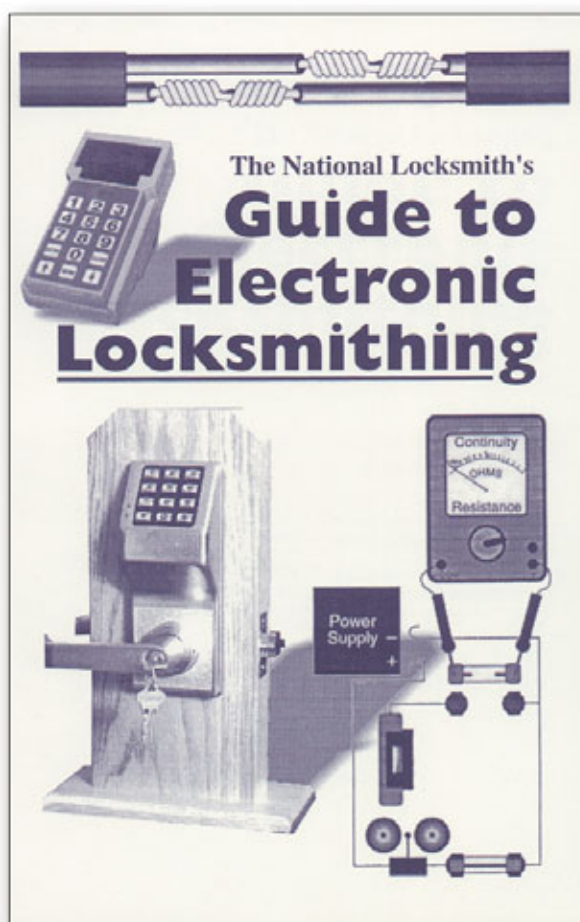
CLICK HERE TO LEARN MORE

#DS - 1

## Toyota, Part 3 50001-69999

56591	2132122244	56665	1123342134
56592	1132122243	56666	3423342132
56593	3432122134	56667	3323342121
56594	3332122133	56668	2323334423
56595	3232122132	56669	2123334312
56596	2232121243	56670	1123332312
56597	2132121132	56671	3423332243
56598	1232113444	56672	2323332134
56599	1132113434	56673	2123332132
56600	4332113422	56674	1223332121
56601	3432113421	56675	4323331132
56602	3332113344	56676	3323324423
56603	3232113312	56677	2323324343
56604	2332113244	56678	2223324312
56605	2232113243	56679	2123323444
56606	2132113232	56680	1123323434
56607	1232112344	56681	3423323422
56608	1132112334	56682	3223323421
56609	4332112244	56683	2223323344
56610	3432112243	56684	1223323312
56611	3332112234	56685	1123323244
56612	3232112134	56686	3423323232
56613	2332112133	56687	2323322344
56614	2232112132	56688	2123322334
56615	2132111244	56689	1123322312
56616	1232111243	56690	4323322244
56617	1132111234	56691	3323322243
56618	4323444312	56692	2323322234
56619	3423443434	56693	2123322134
56620	3323443423	56694	1123322133
56621	3223443422	56695	3423322121
56622	2323443421	56696	3223321243
56623	2223443312	56697	2323321132
56624	2123443244	56698	2223324443
56625	1223443243	56699	2123234434
56626	1123443232	56700	1223234432
56627	4323442311	56701	1123234423
56628	3423442243	56702	3423234421
56629	3323442134	56703	3323234344
56630	3223442133	56704	2323234343
56631	2323442132	56705	2123234334
56632	2223442121	56706	1123234332
56633	2123434423	56707	3423234322
56634	1123434343	56708	3223234321
56635	4323433444	56709	2323234312
56636	3423433434	56710	2223234311
56637	2323433423	56711	2123233444
56638	2223433422	56712	1123233443
56639	2123433421	56713	3423233432
56640	1123433344	56714	2323233423
56641	3423433244	56715	2123233422
56642	3223433243	56716	1223233421
56643	2223433232	56717	4323233321
56644	2123433231	56718	3223233312
56645	1223433231	56719	2223233311
56646	1123433224	56720	2123233244
56647	4323432133	56721	1123233243
56648	3323432132	56722	3423233232
56649	3223432121	56723	2123233223
56650	2323431243	56724	3223233221
56651	2223431132	56725	2123233212
56652	2123344423	56726	1223233211
56653	1123344343	56727	1123232344
56654	4323343443	56728	3423232334
56655	3223343434	56729	2323232332
56656	2223343423	56730	1223232321
56657	2123343422	56731	4323232311
56658	1223343421	56732	3423232244
56659	4323343244	56733	3223232243
56660	3423343243	56734	2123232234
56661	2323343232	56735	1123232221
56662	2223342312	56736	4323232133
56663	2123342311	56737	3323232132
56664	1223342243	56738	2323232123

# Electronic Locksmithing



Everyone knows there's big money in selling, installing and servicing electronic security such as mag locks, electronic strikes, and simple access control.

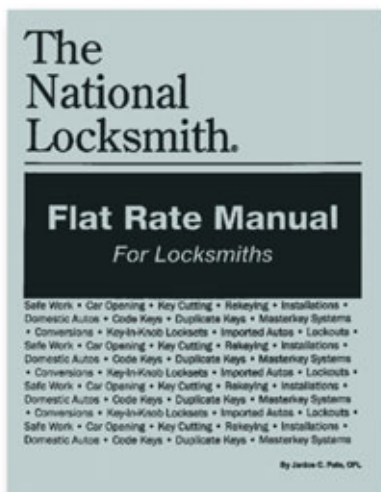
CLICK HERE TO LEARN MORE

#EL - 1

## Toyota, Part 3 50001-69999

56739	3323232121	56773	2323213244	56807	3323123422	56841	3423113443	56875	2123111234	56949	3222343244
56740	2323232112	56774	2223213243	56808	2323123421	56842	3323113434	56876	1223111232	56950	2122343243
56741	2123232111	56775	1223213232	56809	2223123344	56843	3223113432	56877	4322444312	56951	1122343232
56742	1223231244	56776	1123212344	56810	1223123343	56844	2323113423	56878	3322443443	56952	3422342311
56743	1123231243	56777	4323212312	56811	4323123332	56845	2223113422	56879	2322443434	56953	3222342243
56744	4323231232	56778	3323212311	56812	3323123321	56846	2123113421	56880	1222443423	56954	2122342134
56745	3323231221	56779	3223212244	56813	3223123312	56847	1223113344	56881	4322443421	56955	1122342133
56746	2323231134	56780	2323124321	56814	2323123311	56848	4323113334	56882	3322443343	56956	3422342121
56747	2223231132	56781	1123212234	56815	2223123244	56849	3223113332	56883	2322443312	56957	3222334443
56748	2123231121	56782	4323212133	56816	2123123243	56850	2323113321	56884	1222443244	56958	2122334423
56749	1123224423	56783	3423212132	56817	1223123234	56851	2223113312	56885	4322443232	56959	4322334312
56750	4323224312	56784	3223211244	56818	4323123232	56852	2123113311	56886	3322442312	56960	3322333444
56751	3323223444	56785	2323211243	56819	3323123223	56853	1123113244	56887	2322443211	56961	2122333434
56752	3223223443	56786	2223211234	56820	4323123221	56854	4323113234	56888	1222442243	56962	4322333422
56753	2323223434	56787	2123211134	56821	3323123212	56855	3423113233	56889	4322442133	56963	3322333421
56754	2123223423	56788	1223211132	56822	2323123211	56856	3223113232	56890	3322442132	56964	2322333244
56755	3223223421	56789	1123124443	56823	2223122344	56857	2323113223	56891	2322443212	56965	1122333243
56756	2223223344	56790	4323124432	56824	2123122343	56858	2123113222	56892	1222434443	56966	3322332312
56757	1223223343	56791	3423124423	56825	1223122334	56859	1223113221	56893	4322434432	56967	2322332311
56758	4323223244	56792	3323124422	56826	4323122321	56860	1123113212	56894	3322434423	56968	1222332243
56759	3323223243	56793	2323124421	56827	3323123212	56861	4323112343	56895	2322434422	56969	3422332133
56760	4323222344	56794	2223124344	56828	2323122311	56862	3423112334	56896	1222434421	56970	3222332132
56761	3323222334	56795	2123124343	56829	2123122244	56863	3323112332	56897	4322434343	56971	2122332121
56762	4323222311	56796	1223124334	56830	1123122243	56864	3223112321	56898	3322434334	56972	1122331243
56763	3323222134	56797	4323124332	56831	3423122232	56865	2323112312	56899	2122434333	56973	3422324423
56764	2323222133	56798	3423124323	56832	1223122134	56866	2223112244	56900	1122434332	56974	3222324343
56765	3323221243	56799	3323124322	56833	1123122133	56867	2123112243	56901	3422434322	56975	2122324312
56766	2323221132	56800	2323124321	56834	3423122123	56868	1223112234	56902	3222434321	56976	1122323444
56767	2123213444	56801	2223124312	56835	3223121244	56869	4323112134	56903	2122434312	56977	3422323434
56768	1223213434	56802	2123124311	56836	2323121243	56870	3423112133	56904	1122434311	56978	3222323423
56769	1123213423	56803	1223123444	56837	2223121234	56871	3323112132	56905	3422433443	56979	3422323421
56770	3423213421	56804	1123123443	56838	1223121232	56872	3223112123	56906	3222433434	56980	3222323344
56771	3323213344	56805	4323123432	56839	1123121134	56873	2323111244	56907	2122433432	56981	1222323343
56772	3223213312	56806	3423123423	56840	4323113444	56874	2223111243	56908	1122433423	56982	4322323244

## Flat Rate Manual



Now you can easily  
“Price for Profit!”

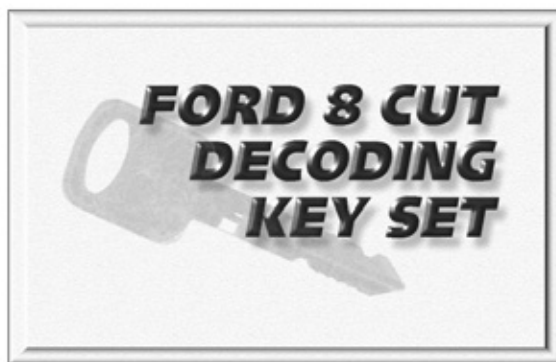
CLICK HERE TO LEARN MORE

#FRM - 1

## Toyota, Part 3 50001-69999

57023	1222123244	57097	3421334443	57171	3221323312
57024	4322123232	57098	3321334434	57172	2321323311
57025	1222122344	57099	3221334432	57173	2221323244
57026	4322122244	57100	2321334423	57174	2121323243
57027	3322122234	57101	2221334422	57175	1221323234
57028	4322122133	57102	2121334421	57176	4321323232
57029	3322121243	57103	1221334344	57177	3321323223
57030	2322113444	57104	4321334334	57178	4321323221
57031	1222113434	57105	3221334332	57179	3321323212
57032	4322113422	57106	2221334323	57180	2321323211
57033	3322113421	57107	2121334322	57181	2221322344
57034	2322113344	57108	1221334321	57182	2121322343
57035	1222113312	57109	1121334312	57183	1221322334
57036	4322113243	57110	4321333444	57184	4321322321
57037	3322113232	57111	3421333443	57185	3321322312
57038	2322112344	57112	2321333434	57186	2321322311
57039	1222112334	57113	2121333432	57187	2121322244
57040	4322112243	57114	1121333423	57188	1121322243
57041	3322112234	57115	4321333421	57189	3421322232
57042	2322112134	57116	3421333244	57190	1221322134
57043	1222112133	57117	3221333243	57191	1121322133
57044	4322111243	57118	2221333234	57192	3421322123
57045	3322111234	57119	1221333232	57193	3221321244
57046	2321344434	57120	4321333222	57194	2321321243
57047	2221344432	57121	3321333221	57195	2221321234
57048	2121344423	57122	3221333212	57196	1221321232
57049	1221344422	57123	2321333211	57197	1121321134
57050	1121344421	57124	2221332344	57198	4321234423
57051	4321344343	57125	1221332343	57199	3421234343
57052	3421344334	57126	4321332332	57200	3321234312
57053	3221344333	57127	3321332321	57201	3221233444
57054	2321344332	57128	3221332312	57202	2321233434
57055	2221344323	57129	2321332311	57203	2221233423
57056	2121344322	57130	2221332244	57204	1221233422
57057	1221344321	57131	2121332243	57205	1121233421
57058	1121344312	57132	1221332234	57206	4321233312
57059	4321343444	57133	4321332221	57207	3421233244
57060	3421343443	57134	3321332134	57208	3321233243
57061	3321343434	57135	2321332133	57209	3221233232
57062	3221343432	57136	2221332132	57210	2121233231
57063	2321343423	57137	2121332123	57211	1221233231
57064	2221343422	57138	1121332122	57212	4321232134
57065	2121343421	57139	4321332112	57213	3421232133
57066	1221343344	57140	3421331244	57214	3321232132
57067	4321343334	57141	3321331243	57215	2321231243
57068	3221343332	57142	3221331234	57216	2221231132
57069	2321343321	57143	2321331232	57217	1221224423
57070	2221343312	57144	2221331221	57218	1121224343
57071	2121343311	57145	2121331134	57219	3421223444
57072	1221343244	57146	1221331132	57220	3321223434
57073	1121343243	57147	1121324443	57221	3221223423
57074	4321343233	57148	4321324432	57222	3421223421
57075	3321343232	57149	3421324423	57223	3221223344
57076	3221343223	57150	3321324422	57224	2321223312
57077	2321343222	57151	2321324421	57225	1221223244
57078	2121343221	57152	2221324344	57226	4321223232
57079	1221343212	57153	2121324343	57227	1221222344
57080	1121343211	57154	1221324334	57228	4321222134
57081	4321342343	57155	4321324332	57229	3321222133
57082	3421342334	57156	3421324323	57230	2321221243
57083	3321342332	57157	3321324322	57231	2121213444
57084	3221342321	57158	2321324321	57232	1221213443
57085	2321342312	57159	2221324312	57233	1121213434
57086	2221342311	57160	2121324311	57234	4321213423
57087	2121342244	57161	1221323444	57235	3421213422
57088	1221342243	57162	1121323443	57236	3221213421
57089	1121342234	57163	4321323432	57237	2321213344
57090	3421342221	57164	3421323423	57238	2221213343
57091	3221342134	57165	3321323422	57239	2121213334
57092	2321342133	57166	2321323421	57240	1221213332
57093	2221342132	57167	2221323344	57241	1121213321
57094	2121342123	57168	1221323343	57242	4321213244
57095	1121342122	57169	4321323332	57243	3421213243
57096	4321342112	57170	3321323321	57244	3321213234

## Ford 8 Cut Decoding Key Set



Complete with 143 specially cut keys  
and simple directions. You get  
door and ignition keys  
within just a couple  
of minutes.

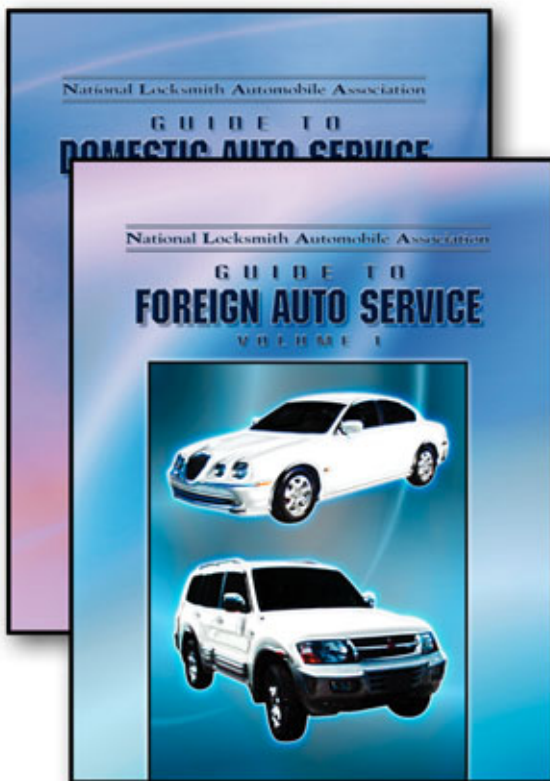
[CLICK HERE TO LEARN MORE](#)



#FD - 8

## NLAA Guide to Domestic Auto Service

## NLAA Guide to Foreign Auto Service



You get car opening, lock removal and service, column service, key and code series information, and many views of the doors, panels and locks.

CLICK HERE TO LEARN MORE



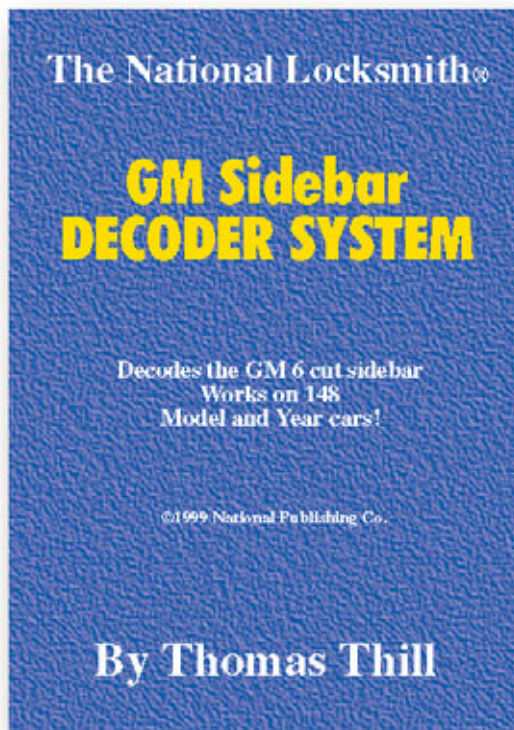
## Toyota, Part 3 50001-69999

57245	3221213233	57319	3212433421	57393	2212322343
57246	2321213232	57320	2212433344	57394	1212322334
57247	1221213223	57321	1112433343	57395	3312322311
57248	1121212344	57322	3312433312	57396	2312322244
57249	4321212334	57323	2312433311	57397	1112322243
57250	3421212332	57324	2112433244	57398	3212322134
57251	3221212244	57325	1112433243	57399	2212322133
57252	2121212243	57326	3212433233	57400	1112322132
57253	1121212234	57327	2212433232	57401	3312321132
57254	4321212133	57328	1212433223	57402	2312234423
57255	3421211244	57329	3312433221	57403	2112234343
57256	3321211243	57330	2312433212	57404	1112234312
57257	1221212344	57331	2112433211	57405	3312233434
57258	23212124423	57332	1112432344	57406	2312233423
57259	2221214343	57333	3312432334	57407	1212233422
57260	2121214312	57334	2312432332	57408	4312233344
57261	1221213444	57335	2112432321	57409	3212233312
57262	1121213434	57336	1112432312	57410	2212233244
57263	4321213422	57337	3312432244	57411	1212233243
57264	3321213421	57338	2312432243	57412	3312232312
57265	3221213344	57339	2112432234	57413	2212232311
57266	2321213312	57340	4312432221	57414	1112232243
57267	2221213244	57341	2312432134	57415	3312232133
57268	2121213243	57342	2112432133	57416	2312232132
57269	1121213232	57343	1112432132	57417	12122321243
57270	4321212334	57344	3312432122	57418	4312224423
57271	3421212244	57345	2212432121	57419	2312224343
57272	3221212243	57346	1212432112	57420	1212224312
57273	2121212234	57347	4312431243	57421	4312223434
57274	1221212134	57348	3212431234	57422	3212223423
57275	1121212133	57349	2212431232	57423	3212223421
57276	4321113444	57350	1212431221	57424	2112223344
57277	3421113434	57351	4312431132	57425	4312223244
57278	3321113423	57352	3212344423	57426	2312223243
57279	3221113422	57353	2212344343	57427	2312221243
57280	2321113344	57354	1212344312	57428	1212213444
57281	2221113244	57355	4312343423	57429	4312213423
57282	2121113243	57356	3212343422	57430	3212213422
57283	1221113232	57357	2212343421	57431	2112213421
57284	1121112344	57358	1212343312	57432	1112213344
57285	4321112244	57359	4312343243	57433	3312213244
57286	3421112243	57360	3212343232	57434	2312213243
57287	3321112234	57361	2212342312	57435	1212213232
57288	2312444343	57362	1212342311	57436	4312212334
57289	2112444312	57363	4312342134	57437	3212212244
57290	1112443434	57364	3212342133	57438	1212212243
57291	3312443422	57365	2212342132	57439	3312212134
57292	2312443421	57366	1212342121	57440	2312212133
57293	2112443312	57367	4312343433	57441	2112212124
57294	1112443244	57368	2312334312	57442	1112212123
57295	3312443232	57369	2112333444	57443	3312124443
57296	2312442312	57370	4312333423	57444	2312124434
57297	2112442311	57371	2312333422	57445	2112124432
57298	1112442243	57372	2112333421	57446	1112124423
57299	3312442133	57373	1112333244	57447	3212124421
57300	2312442132	57374	2312333232	57448	2212124344
57301	2112442121	57375	2112332312	57449	1212124343
57302	1112434443	57376	1112332311	57450	4312124333
57303	3312434432	57377	3312332134	57451	3212124332
57304	2312434423	57378	2212332133	57452	2212124323
57305	2112434422	57379	1212332132	57453	1112124322
57306	1112434421	57380	4312331243	57454	3312124312
57307	3312434343	57381	3212331132	57455	2312123444
57308	2312434334	57382	2212324423	57456	2112123443
57309	1212434333	57383	1212324343	57457	1112123434
57310	4312434323	57384	4312323444	57458	3312123423
57311	3212434322	57385	3212323434	57459	2312123422
57312	2212434321	57386	2212323423	57460	1212123421
57313	1212434312	57387	1112323422	57461	4312123343
57314	4312434344	57388	3312323344	57462	3212123334
57315	3212434343	57389	2312323312	57463	2212123332
57316	2212434342	57390	2112323244	57464	1212123321
57317	1212434341	57391	1112323243	57465	4312123244
57318	4312434340	57392	3212323242	57466	3212123243

## Toyota, Part 3 50001-69999

57467	2212123234	57541	2111323212	57615	2244332134	57629	3344322234	57643	2244233423	57657	2344232311
57468	1212123233	57542	3311322343	57616	2344332132	57630	1244322134	57644	3244233421	57658	3344232243
57469	3312123223	57543	2211322334	57617	3344331243	57631	2344322132	57645	3444233343	57659	1244232234
57470	2212122344	57544	4311322321	57618	1244331132	57632	3344321243	57646	1244233321	57660	1244232221
57471	1212122343	57545	2311322312	57619	2344324343	57633	1244321132	57647	2344233311	57661	2344232133
57472	4312122332	57546	1211322244	57620	3344323434	57634	2344234423	57648	3344233243	57662	3344232123
57473	2312122244	57547	3211322234	57621	1244323423	57635	3344234421	57649	1244233234	57663	3444232121
57474	1112122243	57548	1211322232	57622	2344323421	57636	1244234343	57650	2244233232	57664	2244232112
57475	3212122134	57549	3211322133	57623	3344323312	57637	2244234333	57651	3244233222	57665	3244231244
57476	2212122133	57550	2111322132	57624	1244323244	57638	3244234323	57652	3344233212	57666	3444231234
57477	1212121244	57551	3311321244	57625	2344323232	57639	3444234321	57653	1244233211	57667	2244231232
57478	4312121234	57552	2211321243	57626	3344322334	57640	2244234312	57654	2344232343	57668	3244231134
57479	3212113444	57553	4311321232	57627	1244322312	57641	3244233443	57655	3344232332	57669	3444231121
57480	2212113434	57554	2311321134	57628	2344322244	57642	3444233432	57656	1244232321	57670	2244224423
57481	1212113423	57555	1211234423								
57482	4312113344	57556	3211234312								
57483	3212113244	57557	2111233444								
57484	2212113243	57558	3311233423								
57485	1212113232	57559	2211233422								
57486	4312112334	57560	4311233344								
57487	3212112244	57561	2311233312								
57488	2212112243	57562	1211233244								
57489	1212112234	57563	3211233232								
57490	3311344423	57564	2111232312								
57491	2211344343	57565	3311232134								
57492	4311343434	57566	2211232133								
57493	2311343423	57567	4311231243								
57494	1211343422	57568	2311224423								
57495	3211343312	57569	1211224343								
57496	2111343244	57570	3211223444								
57497	3311343232	57571	2111223434								
57498	2211342312	57572	3311223422								
57499	4311342243	57573	2111223421								
57500	2311342134	57574	3311223312								
57501	1211342133	57575	2211223244								
57502	3211334423	57576	4311223232								
57503	1211334343	57577	2211222344								
57504	3211333444	57578	4311222134								
57505	1211333434	57579	2311222133								
57506	2311333422	57580	1211221243								
57507	1211333421	57581	3211213434								
57508	2311333243	57582	2111213423								
57509	4311332312	57583	3311213344								
57510	2311332311	57584	2211213244								
57511	1211332243	57585	4311213232								
57512	2311332133	57586	2311212344								
57513	1211332132	57587	1211212334								
57514	3211331132	57588	3211212243								
57515	2111324443	57589	2111212234								
57516	3311324432	57590	3311124423								
57517	2211324423	57591	1211124343								
57518	4311324421	57592	2311123434								
57519	2311324344	57593	3311123422								
57520	1211324343	57594	1211123344								
57521	2311324333	57595	2311123243								
57522	1211324332	57596	3311122344								
57523	3211324322	57597	1211122334								
57524	2111324321	57598	2311122243								
57525	3311324311	57599	3344344312								
57526	2211323444	57600	1244343423								
57527	4311323434	57601	2344343421								
57528	2311323432	57602	3344343243								
57529	1211323423	57603	1244343232								
57530	3211323421	57604	2344342311								
57531	2111323344	57605	3344342134								
57532	2311323334	57606	1244342133								
57533	4311323321	57607	2344342121								
57534	2311323312	57608	3244334343								
57535	1211323311	57609	3444333434								
57536	3211323243	57610	3444333422								
57537	2111323234	57611	2244333421								
57538	3211323232	57612	2344333243								
57539	2111323223	57613	3244332312								
57540	3211323221	57614	3444332243								

## GM Sidebar Lock Decoder System



Tom Thill, the author of a new book, has invented an amazing new way to make keys for six cut GM Sidebar Locks.

[CLICK HERE TO LEARN MORE](#)

#TT - 1

# Toyota, Part 3

## 50001-69999

57671	3244224312	57745	1243343232	57819	2243124312	57893	2234431243	57967	2332443444	58041	2234322311
57672	3444223423	57746	2343342311	57820	3243123444	57894	1234431132	57968	1243434333	58042	2134322244
57673	1244223422	57747	3343342134	57821	3443123434	57895	3434344423	57969	2134433233	58043	1234322243
57674	2344223344	57748	3443342132	57822	2243123432	57896	3234344422	57970	1134343343	58044	1134322234
57675	3344223244	57749	2243342121	57823	3243123422	57897	2334344421	57971	2134343233	58045	4334322133
57676	1244223243	57750	2243334312	57824	3443123344	57898	1134344343	57972	1134333434	58046	3334322132
57677	2244222344	57751	2243332311	57825	1243123343	57899	2334344332	57973	2134333232	58047	3234322121
57678	3244222312	57752	2243332134	57826	1243123332	57900	1234344323	57974	1134234333	58048	2334321243
57679	3344222134	57753	3243332121	57827	2343123312	57901	3434344321	57975	2133434343	58049	2234321132
57680	1244222133	57754	2343331132	57828	3343123244	57902	3234344312	57976	1133433423	58050	2134234443
57681	1244222121	57755	3243324343	57829	1243123243	57903	2234344311	57977	2133433311	58051	1234234434
57682	2344221132	57756	3443323444	57830	2243123233	57904	1134343443	57978	1133433232	58052	1134234432
57683	3344213423	57757	3243323434	57831	3243123234	57905	2334343432	57979	2133434343	58053	4334234422
57684	1244213422	57758	2243323432	57832	3343123221	57906	1234343423	57980	1133343312	58054	3434234421
57685	2344213344	57759	2343323344	57833	1243123212	57907	3434343421	57981	2133342133	58055	3334234344
57686	3344213244	57760	3243323244	57834	2343122344	57908	2334343344	57982	1133323434	58056	2334234343
57687	1244213243	57761	3443323232	57835	3343122334	57909	1234343321	57983	2133233312	58057	2234234334
57688	2344212344	57762	3443322334	57836	1243122332	57910	3234343311	57984	1133323232	58058	1134234332
57689	3344212312	57763	1243322312	57837	2343122312	57911	2234343244	57985	2133234343	58059	3434234322
57690	1244212311	57764	2343322244	57838	3343122244	57912	1134343243	57986	1133233434	58060	3334234321
57691	2344212243	57765	3343322234	57839	1243122243	57913	2334343232	57987	2133233312	58061	3234233412
57692	3344212134	57766	1243322134	57840	2343122232	57914	1234343223	57988	1133233232	58062	2334234311
57693	1244212133	57767	2243322132	57841	3243122133	57915	3434343221	57989	2133123343	58063	2234233444
57694	2344212121	57768	3243321243	57842	3443122123	57916	3234343212	57990	1133123332	58064	1234233443
57695	3344211243	57769	3443234423	57843	1243122122	57917	2234343211	57991	2132333343	58065	4334233432
57696	1244211234	57770	1243234343	57844	2343122112	57918	1234342344	57992	1132334343	58066	3234233423
57697	2344211132	57771	2343233444	57845	3343121243	57919	3234342334	57993	2132333423	58067	2334233422
57698	3343443423	57772	2343233423	57846	1243121234	57920	2134342332	57994	1132333232	58068	2234233421
57699	1243443422	57773	3343233421	57847	2343121221	57921	1134342321	57995	2132323343	58069	1234233344
57700	2343443312	57774	3443233312	57848	3343121132	57922	2133344312	57996	1132323332	58070	4334233312
57701	3343443232	57775	1243233244	57849	1243113444	57923	3233343421	57997	2123334343	58071	3234233311
57702	1243442312	57776	1243233232	57850	2343113434	57924	1133343244	57998	1123234333	58072	2334233244
57703	2344222423	57777	2343232311	57851	3343113423	57925	2133342311	57999	2121334333	58073	2134233243
57704	3343442133	57778	3343232134	57852	1243113422	57926	3233342134	58000	2334342312	58074	1134233234
57705	1243442132	57779	3443232132	57853	2343113344	57927	1133342132	58001	2234342311	58075	3434233223
57706	2343434432	57780	2243232121	57854	3243113312	57928	2133324423	58002	2134342244	58076	3234233222
57707	3343434422	57781	3243231132	57855	3443113243	57929	3233323444	58003	1234342243	58077	2234233221
57708	1243434421	57782	3443224343	57856	2243113232	57930	1133323422	58004	1134342234	58078	2134233212
57709	1243434334	57783	2243224312	57857	3243112334	57931	2133323244	58005	4334342221	58079	1234233211
57710	1243434323	57784	3243223434	57858	3443112311	57932	3233322312	58006	3434342134	58080	1134232344
57711	2343434321	57785	3443223422	57859	2243112244	57933	1133322311	58007	3234342133	58081	3434232334
57712	3343434311	57786	1243223421	57860	3243112234	57934	2133322243	58008	2334342132	58082	2334232332
57713	3443433434	57787	2343223312	57861	3443112133	57935	3233322134	58009	2234342123	58083	2234232321
57714	3443433423	57788	3343223243	57862	2243112132	57936	1133322132	58010	2134342122	58084	2134232312
57715	1243433422	57789	3443223244	57863	3243111243	57937	2133321243	58011	1234342121	58085	1234232311
57716	2243433344	57790	2243222334	57864	3434443423	57938	3244434423	58012	1134342112	58086	1134232244
57717	2243433312	57791	2343222311	57865	3234443422	57939	3244434312	58013	4334334423	58087	4334232234
57718	2343433244	57792	3343222133	57866	2234443421	57940	3244433423	58014	3234334312	58088	3434232232
57719	2343432334	57793	3443222121	57867	1234443312	57941	3244433421	58015	2234333444	58089	3234232221
57720	2343433223	57794	1243221243	57868	3434443233	57942	3244433312	58016	1234333422	58090	2234232134
57721	3343433221	57795	2343213444	57869	2334443232	57943	3244433244	58017	4334333244	58091	1234232133
57722	1243433212	57796	3343213423	57870	2134442312	57944	3244433232	58018	3234333221	58092	1134232132
57723	2343432344	57797	1243213422	57871	1134442311	57945	3244432344	58019	2234332312	58093	4334232122
57724	2343432334	57798	2343213344	57872	3334442134	57946	3244432312	58020	1234332311	58094	3334232121
57725	3243432321	57799	3343213244	57873	2334442133	57947	3244432244	58021	4334332134	58095	3234232112
57726	3443432311	57800	1243213243	57874	2134442132	57948	3244432232	58022	3234332132	58096	2334232111
57727	2243432244	57801	2343212344	57875	1134442121	57949	3244432133	58023	2334332122	58097	2234232124
57728	3243432234	57802	3343212312	57876	3234434343	57950	3244432122	58024	2234332121	58098	2134231243
57729	3443432221	57803	1243212311	57877	2234434312	57951	3244432112	58025	2134332112	58099	1234231234
57730	2243432134	57804	2343212243	57878	1134433434	57952	3244431132	58026	1134331243	58100	1134231232
57731	2343432132	57805	3343212134	57879	3234433422	57953	3244344343	58027	3443244232	58101	4342311334
57732	3343432122	57806	1243212133	57880	2234433421	57954	3244343244	58028	3234324343	58102	3434231132
57733	1243432121	57807	2343212121	57881	1134433344	57955	3244323444	58029	2334324312	58103	3334231121
57734	2343432111	57808	3343211243	57882	2334433311	57956	3244234434	58030	2234323444	58104	3234224443
57735	3343431243	57809	1243211234	57883	1234433244	57957	3244233444	58031	1234323434	58105	2334224434
57736	1243431234	57810	2343211132	57884	3434433232	57958	3244213444	58032	4334323422	58106	2234224432
57737	2343431221	57811	3343124434	57885	2334433221	57959	3243443434	58033	3434323421	58107	2134224423
57738	3343431132	57812	1243124432	57886	2134432312	57960	3243434443	58034	3234323344	58108	1134224422
57739	1243431121	57813	2343124422	57887	1134432311	57961	3243434344	58035	2234323312	58109	4334224344
57740	2243344343	57814	3343124344	57888	3334432134	57962	3234443434	58036	2134323244	58110	3434224343
57741	2343343434	57815	1243124343	57889	2234432133	57963	2134443244	58037	1134323243	58111	3334224334
57742	3243343422	57816	2243124333	57890	1234432132	57964	3334344434	58038	3434322344	58112	2334224333
57743	3443343312	57817	3243124323	57891	3434432121	57965	2234344344	58039	3234322334	58113	2234224332
57744	1243343244	57818	3443124321	57892	3234432112	57966	1134343444	58040	2334322312	58114	2134224323

## Toyota, Part 3 50001-69999

58115	1134224322	58189	4334212134	58263	2233213344	58278	3233211134	58293	4333123434	58308	1133122344
58116	4334224312	58190	3434212133	58264	1233213312	58279	2233211132	58294	3233123432	58309	3433122334
58117	3434224311	58191	3334212132	58265	4333213243	58280	1233124443	58295	2233123423	58310	2333122332
58118	3334223444	58192	3234212123	58266	3233213232	58281	4333124432	58296	1233123422	58311	2133122321
58119	3234223443	58193	2334212122	58267	2233212344	58282	3233124423	58297	4333123344	58312	1133122312
58120	2334223434	58194	2134212121	58268	1233212334	58283	2233124422	58298	3233123321	58313	3433122244
58121	2234223432	58195	1234212112	58269	4333212311	58284	1233124421	58299	2233123312	58314	2333122243
58122	2134223423	58196	1134211244	58270	3233212244	58285	4333124343	58300	1233123311	58315	2133122234
58123	1134223422	58197	4334211234	58271	2233212243	58286	3233124334	58301	4333123243	58316	4333122134
58124	4334223344	58198	3434211232	58272	1233212234	58287	2233124332	58302	3233123234	58317	3233122133
58125	3434223343	58199	3334211221	58273	4333212133	58288	1233124323	58303	2233123232	58318	2233122132
58126	2334223334	58200	3234211134	58274	3233212132	58289	4333124321	58304	1233123223	58319	1233122123
58127	2134223332	58201	2334211132	58275	2233212121	58290	3233124312	58305	3433123221	58320	3433122121
58128	1234223321	58202	2133444343	58276	1233211244	58291	2233124311	58306	2333123212	58321	2333122112
58129	1134223312	58203	1133444312	58277	4333211234	58292	1233123444	58307	2133123211	58322	2133121244
58130	4334223244	58204	3433443423								
58131	3434223243	58205	2333443422								
58132	3334223234	58206	2133443421								
58133	2334223233	58207	1133443312								
58134	2134223232	58208	3433443243								
58135	1134223223	58209	2333443232								
58136	2134223221	58210	2133442312								
58137	1134223212	58211	1133442311								
58138	4334222344	58212	3433442134								
58139	3434222343	58213	2333442133								
58140	3334222334	58214	2133442132								
58141	3234222332	58215	1133442121								
58142	2134222321	58216	3433434312								
58143	1134222312	58217	2333433444								
58144	4334222134	58218	2133433422								
58145	3434222133	58219	1133433421								
58146	3334222132	58220	3433433221								
58147	2334222123	58221	2333432312								
58148	3334222121	58222	2133432311								
58149	2334222112	58223	1133432243								
58150	2134222111	58224	3433432132								
58151	1234221244	58225	2333432122								
58152	1134221243	58226	2133432121								
58153	4334221232	58227	1133432112								
58154	3334221221	58228	3433431132								
58155	2334221134	58229	2333234443								
58156	2234221132	58230	2133234423								
58157	2134221121	58231	1133234312								
58158	1234213444	58232	3433233422								
58159	1134213443	58233	2333233421								
58160	4334213432	58234	2133233244								
58161	3434213423	58235	1133232312								
58162	3334213422	58236	3433232243								
58163	3234213421	58237	2333232134								
58164	2334213344	58238	2133232132								
58165	2134213343	58239	1133232121								
58166	1134213334	58240	3433231132								
58167	3434213321	58241	2333224423								
58168	3334213312	58242	2133224343								
58169	3234213311	58243	1133224312								
58170	2334213244	58244	3433223434								
58171	2234213243	58245	2333223423								
58172	2134213234	58246	1233223422								
58173	1134213233	58247	4333223344								
58174	4334213223	58248	3233223312								
58175	3434213222	58249	2233223244								
58176	3234213221	58250	1233223243								
58177	2334213212	58251	3433222344								
58178	2234213211	58252	2333222334								
58179	2134213244	58253	1233222312								
58180	1234212343	58254	4333222134								
58181	1134212334	58255	3233222133								
58182	4334212321	58256	2133222132								
58183	3434212312	58257	4333221243								
58184	3334212311	58258	3233221132								
58185	3234212244	58259	2233213444								
58186	2334212243	58260	1233213434								
58187	2234212234	58261	4333213422								
58188	1234212232	58262	3233213421								

## GM Steering Column Course

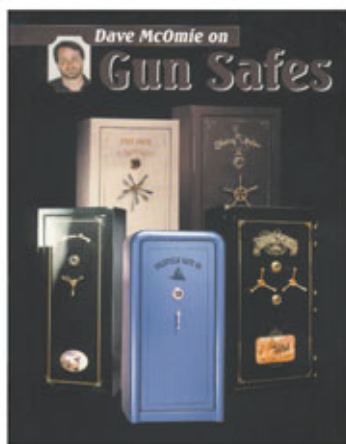


Comes complete with take-home test so you can become certified on GM steering column service! Authoritative training on every domestic GM column from 1967 to 1995.

[CLICK HERE TO LEARN MORE](#)

#GM - 2

# Gun Safes



Need a drill point or  
relocker drill point  
on a gun safe?

CLICK HERE TO LEARN MORE



#GS - 1

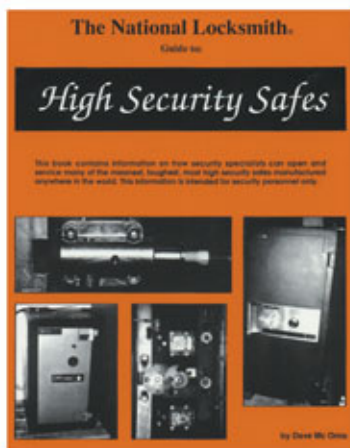
## Toyota, Part 3 50001-69999

58323	1133121243	58397	3232434344	58471	3232332121	58545	2232223444
58324	3433121232	58398	2232434343	58472	2232331243	58546	2132223434
58325	2333121221	58399	1232434334	58473	1232331132	58547	1132223423
58326	2133121134	58400	4332434323	58474	1132324443	58548	2132223421
58327	1133121132	58401	3332434322	58475	4332324432	58549	1232223344
58328	3433113434	58402	3232434321	58476	3432324423	58550	4332223244
58329	2333113423	58403	2332434312	58477	3332324422	58551	3332223243
58330	2133113422	58404	2232434311	58478	2332324421	58552	4332221243
58331	1133113421	58405	2132433444	58479	2232324344	58553	3332221132
58332	3433113312	58406	1132433443	58480	1232324343	58554	2332213444
58333	2333113244	58407	3432433432	58481	4332324332	58555	2232213434
58334	2133113243	58408	2332433423	58482	3232324323	58556	2132213423
58335	1133113232	58409	2232433422	58483	2332324322	58557	1132213422
58336	3433112334	58410	2132433421	58484	2132324321	58558	4332213344
58337	2333112312	58411	1132433344	58485	1232324312	58559	3432213312
58338	2133112311	58412	3432433312	58486	1132324311	58560	3332213244
58339	4333112243	58413	2332433311	58487	4332323443	58561	3232213243
58340	3233112234	58414	2232433244	58488	3232323434	58562	2332213232
58341	2233112134	58415	1232433243	58489	2232323432	58563	2132212344
58342	1233112133	58416	4332433232	58490	1232323423	58564	1232212334
58343	4333112144	58417	3232433223	58491	4332323421	58565	4332212311
58344	3233112143	58418	2332433222	58492	3432323344	58566	3432212244
58345	2233112134	58419	2132433221	58493	2332323332	58567	3232212243
58346	2132444343	58420	1232433212	58494	2132323312	58568	2132212234
58347	1232444334	58421	1132433211	58495	1132323311	58569	1232212134
58348	4332444332	58422	4332433243	58496	4332323243	58570	1132212133
58349	3432444324	58423	3232433234	58497	3232323234	58571	3432212144
58350	3332444322	58424	2232433232	58498	2132323232	58572	3332212143
58351	3232444321	58425	2132433231	58499	4332323222	58573	3232212134
58352	2332444312	58426	1232433212	58500	1232323221	58574	2332212134
58353	2232444311	58427	1132433211	58501	4332323211	58575	2232212132
58354	2132444343	58428	4332432243	58502	3432323244	58576	2132212443
58355	1232444344	58429	3432432234	58503	3232323234	58577	1232212434
58356	1132444343	58430	3332432232	58504	2232323233	58578	1132212432
58357	4332444342	58431	2332432221	58505	1132323232	58579	4332212434
58358	3432444341	58432	2132432134	58506	3432323212	58580	3432212423
58359	3332444344	58433	1132432133	58507	3232323211	58581	3332212422
58360	2332444343	58434	4332432123	58508	2332323244	58582	2332212421
58361	2132444334	58435	3432432122	58509	1232323243	58583	2232212344
58362	1132444333	58436	3232432121	58510	4332323232	58584	2132212332
58363	4332444332	58437	2332432112	58511	2132323231	58585	1232212324
58364	3432444331	58438	2232432111	58512	1132323230	58586	1132212323
58365	3332444324	58439	2132432144	58513	3432323223	58587	3432212344
58366	3232444323	58440	1232432143	58514	1132323222	58588	3332212334
58367	2332444324	58441	1132432134	58515	3432323221	58589	3232212332
58368	2132444323	58442	4332432122	58516	3232323211	58590	2232212331
58369	1232444322	58443	3432432113	58517	2332323244	58591	1232212244
58370	1132444321	58444	3332432112	58518	2232323243	58592	4332212234
58371	3432444320	58445	3232432111	58519	2132323242	58593	3332212233
58372	3332444319	58446	2332432110	58520	1132323241	58594	3232212232
58373	3232444318	58447	2132432143	58521	3432323240	58595	2332212231
58374	2332444317	58448	1232432142	58522	3332323239	58596	2132212243
58375	2232444316	58449	4332432141	58523	3232323238	58597	1232212242
58376	2132444315	58450	3332432140	58524	2332323237	58598	1132212241
58377	1232444314	58451	3232432139	58525	2132323236	58599	4332212240
58378	1132444313	58452	2232432138	58526	1232323235	58600	3432212239
58379	4332444312	58453	2132432137	58527	1132323234	58601	3332212238
58380	3432444311	58454	1132432136	58528	3432323233	58602	3232212237
58381	3332444310	58455	3432432135	58529	3232323232	58603	2332212236
58382	3232444309	58456	3332432134	58530	2232323231	58604	2232212235
58383	2332444308	58457	3232432133	58531	1232323230	58605	2132212234
58384	1232444307	58458	2332432132	58532	4332323229	58606	1232212233
58385	1132444306	58459	2132432131	58533	3432323228	58607	1132212232
58386	4332444305	58460	1232432130	58534	2332323227	58608	4332212231
58387	3432444304	58461	1132432129	58535	1232323226	58609	3432212244
58388	3332444303	58462	3432334423	58536	1132323225	58610	3332212243
58389	2332444302	58463	2332334412	58537	3432323224	58611	3232212234
58390	2232444301	58464	2132334411	58538	3232323223	58612	2332212233
58391	2132444300	58465	1132334410	58539	2332323222	58613	2232212232
58392	1232444344	58466	3432334409	58540	1232323221	58614	2132212231
58393	1132444343	58467	2332334408	58541	1132323220	58615	1232212244
58394	4332444342	58468	2132334407	58542	4332323219	58616	1132212243
58395	3432444341	58469	1132334406	58543	3332323218	58617	4323444343
58396	3332444340	58470	3432334405	58544	3232323217	58618	3423444312

## Toyota, Part 3 50001-69999

58619	3323443434	58653	4323344312	58687	2223322344	58721	4323233234	58755	2323223421	58789	4323124434
58620	3223443423	58654	3423343443	58688	1223322334	58722	3223233232	58756	2123223344	58790	3423124432
58621	2323443422	58655	2323343434	58689	4323322311	58723	1223233223	58757	1123223343	58791	3323124423
58622	2223443421	58656	2123343423	58690	3423322244	58724	2323233221	58758	3423223244	58792	3223124422
58623	2123443312	58657	1223343422	58691	3223322243	58725	1223233212	58759	3223223243	58793	2223124421
58624	1223443244	58658	1123343421	58692	2123322234	58726	1123233211	58760	3423222344	58794	2123124344
58625	1123443243	58659	3423343244	58693	1223322134	58727	4323232343	58761	3223222334	58795	1223124343
58626	4323442312	58660	3223343243	58694	4323322132	58728	3223232334	58762	3423222311	58796	1123124334
58627	3423442311	58661	2223343232	58695	3323322121	58729	2123232332	58763	3223222134	58797	3423124332
58628	3323442243	58662	2123342312	58696	2323321243	58730	1123232321	58764	2123222133	58798	3323124323
58629	3223442134	58663	1223342311	58697	2223321132	58731	3423232311	58765	3223221243	58799	3223124322
58630	2323442133	58664	1123342243	58698	2123234443	58732	3323232244	58766	2123221132	58800	2223124321
58631	2223442132	58665	4323342133	58699	3223234434	58733	2323232243	58767	1223213444	58801	2123124312
58632	2123442121	58666	3323342132	58700	1123234432	58734	1223232234	58768	1123213434	58802	1223124311
58633	1223434423	58667	3223342121	58701	4323234422	58735	4323232134	58769	4323213422	58803	1123123444
58634	4323434312	58668	2223334423	58702	3323234421	58736	3423232133	58770	3323213421	58804	4323123434
58635	3423433444	58669	1223334312	58703	3223234344	58737	3223232132	58771	3223213344	58805	3423123432
58636	3223433434	58670	4323332311	58704	2223234343	58738	2123232123	58772	2323213312	58806	3323123423
58637	2223433423	58671	3223332243	58705	1223234334	58739	3223232121	58773	2223213244	58807	3223123422
58638	2123433422	58672	2223332134	58706	4323234323	58740	2123232112	58774	2123213243	58808	2223123421
58639	1223433421	58673	1223332132	58707	3223234322	58741	1223232111	58775	1123213232	58809	2123123344
58640	4323433312	58674	1123332121	58708	2323234321	58742	1123231244	58776	4323212334	58810	1123123343
58641	3323433244	58675	3423331132	58709	2223234312	58743	4323231234	58777	3423212312	58811	3423123332
58642	2323433243	58676	3223324423	58710	2123234311	58744	3423231232	58778	3223212311	58812	3223123321
58643	2123433232	58677	2223324343	58711	1223233444	58745	3223231221	58779	2323212244	58813	2323123312
58644	1223433231	58678	2123324312	58712	4323233434	58746	2223231134	58780	1223212243	58814	2223123311
58645	1123433231	58679	1223323444	58713	3223233432	58747	2123231132	58781	4323212134	58815	2123123244
58646	4323432134	58680	4323323423	58714	2223233423	58748	1223231121	58782	3423212133	58816	1223123243
58647	3423432133	58681	3323323422	58715	1223233422	58749	4323224343	58783	3323212132	58817	1123123234
58648	3223432132	58682	2323323421	58716	1123233421	58750	3423224312	58784	2323211244	58818	3423123232
58649	2323432121	58683	2123323344	58717	3423233321	58751	3223223444	58785	2223211243	58819	3223123223
58650	2223431243	58684	1123323312	58718	2323233312	58752	2323223443	58786	2123211234	58820	3423123221
58651	2123431132	58685	4323323243	58719	2123233311	58753	2223223434	58787	1223211134	58821	3223123212
58652	1223344423	58686	3223323232	58720	1223232444	58754	1223223423	58788	1123211132	58822	2223123211

## High Security Safes Volumes 1 & 2



Learn to open  
High Security  
Safes now!

CLICK HERE TO LEARN MORE



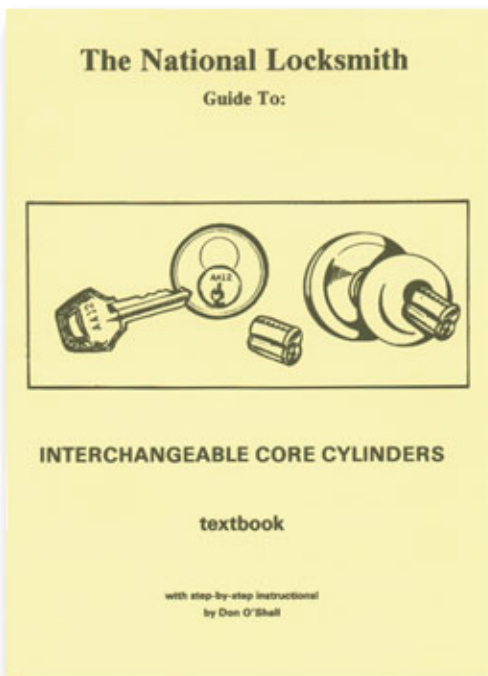
# Toyota, Part 3

## 50001-69999

58823	2123122344	58897	3422434343	58971	1222332121	59045	3222111234	59119	1121333232	59193	2321321244
58824	1223122343	58898	3222434334	58972	4322331132	59046	2221344434	59120	3421333222	59194	2221321243
58825	1123122334	58899	1222434333	58973	3322324423	59047	2121344432	59121	3221333221	59195	2121321234
58826	3423122321	58900	4322434323	58974	2322324343	59048	1221344423	59122	2321333212	59196	1121321232
58827	3223122312	58901	3322434322	58975	1222324312	59049	1121344422	59123	2221333211	59197	4321321132
58828	2223122311	58902	2322434321	58976	4322323443	59050	4321344344	59124	2121332344	59198	3421234423
58829	1223122244	58903	1222434312	58977	3322323434	59051	3421344343	59125	1121332343	59199	3321234343
58830	4323122234	58904	4322433444	58978	2322323423	59052	3321344334	59126	3421332332	59200	3221234312
58831	3323122232	58905	3322433443	58979	3322323421	59053	2321344333	59127	3221332321	59201	2321233444
58832	1123122134	58906	2322433434	58980	2322323344	59054	2221344332	59128	2321332312	59202	2221233434
58833	4323122132	58907	1222433432	58981	1122323343	59055	2121344323	59129	2221332311	59203	2121233423
58834	3323122123	58908	4322433422	58982	3422323244	59056	1221344322	59130	2121332244	59204	1121233422
58835	3223121244	58909	3322433421	58983	3222323243	59057	1121344321	59131	2221332243	59205	4321233444
58836	2223121243	58910	2322433344	58984	3422322344	59058	4321344311	59132	1121332234	59206	3421233312
58837	2123121234	58911	1122433343	58985	3222322334	59059	3421343444	59133	3421332221	59207	3321233244
58838	1123121232	58912	3422433312	58986	3422322311	59060	3321343443	59134	3221332134	59208	3221233243
58839	4323121132	58913	3322433311	58987	1122322244	59061	3221343434	59135	2221332133	59209	2321233232
58840	3423113444	58914	2122433244	58988	3422322134	59062	2321343432	59136	2121332132	59210	1221232312
58841	3323113443	58915	1122433243	58989	3222322133	59063	2221343423	59137	1221332123	59211	1121232311
58842	3223113434	58916	3422433233	58990	3422321243	59064	2121343422	59138	4321332121	59212	3421232134
58843	2323113432	58917	3322433232	58991	3222321132	59065	1121343421	59139	3421332112	59213	3321232133
58844	2223113423	58918	1222433223	58992	1122234423	59066	1121343344	59140	3321331244	59214	3221232132
58845	2123113422	58919	2322433221	58993	2322234312	59067	3421343334	59141	3221331243	59215	2221231243
58846	1223113421	58920	1222433212	58994	3422233434	59068	2321343332	59142	2321331234	59216	2121231132
58847	1123113414	58921	4322432344	58995	1122233423	59069	2221343321	59143	2221331232	59217	1121224423
58848	3423113334	58922	3322432343	58996	1122233421	59070	2121343312	59144	2121331221	59218	4321224312
58849	2323113332	58923	2322432334	58997	2322233312	59071	1221343311	59145	1221331134	59219	3321223444
58850	2223113321	58924	1222432332	58998	3422233243	59072	1121343244	59146	1121331132	59220	3221223434
58851	2123113312	58925	4322432312	58999	3422232312	59073	3421343234	59147	4321324434	59221	2321223423
58852	1223113311	58926	3322432311	59000	3422232243	59074	3421343233	59148	3421324432	59222	3321223421
58853	4323113243	58927	2322432244	59001	3422232133	59075	3221343232	59149	3321324423	59223	2321223344
58854	3423113234	58928	1222432243	59002	3422231243	59076	2321343223	59150	3221324422	59224	2121223312
58855	3323113233	58929	4322432232	59003	1122231132	59077	2121343222	59151	2221324421	59225	1121223244
58856	2323113232	58930	3322432134	59004	2322213434	59078	1221343221	59152	2121324344	59226	3421223232
58857	2223113223	58931	3322432133	59005	3422213422	59079	1121343212	59153	1221324343	59227	1121222344
58858	1223113222	58932	1222432132	59006	3422213344	59080	4321342344	59154	1121324334	59228	3421222134
58859	1123113221	58933	4322432122	59007	1122213312	59081	3421342343	59155	3421324332	59229	3321222133
58860	4323112344	58934	1222432121	59008	2322213243	59082	3321342334	59156	3321324323	59230	2121221243
58861	3423112343	58935	4322432111	59009	2322212344	59083	3221342332	59157	3221324322	59231	1221213444
58862	3323112334	58936	3322431244	59010	3422212244	59084	2321342321	59158	2221324321	59232	1121213443
58863	3223112332	58937	2322431243	59011	1122212234	59085	2221342312	59159	2121324312	59233	4321213432
58864	2323112321	58938	1222431234	59012	2322212133	59086	2121342311	59160	1221324311	59234	3421213423
58865	2223112312	58939	4322431221	59013	3422211243	59087	1221342244	59161	1121323444	59235	3321213422
58866	2123112244	58940	3322431134	59014	1122211234	59088	1121342243	59162	4321323434	59236	2321213421
58867	1223112243	58941	2322431132	59015	3222124423	59089	3421342232	59163	3421323432	59237	2221213344
58868	1123112234	58942	1222431121	59016	2122124343	59090	3321342221	59164	3321323423	59238	2121213343
58869	3423112134	58943	4322434434	59017	1122124312	59091	2321342134	59165	3221323422	59239	1221213334
58870	3323112133	58944	3322434312	59018	3422123434	59092	2221342133	59166	2221323421	59240	1121213332
58871	3223112132	58945	2322434343	59019	3222123423	59093	2121342132	59167	2121323344	59241	4321213312
58872	2323112123	58946	12224343423	59020	3422123421	59094	1221342123	59168	1121323343	59242	3421213244
58873	2223111244	58947	43224343421	59021	3222123344	59095	4321342121	59169	3421323332	59243	3321213243
58874	2123111243	58948	3322434312	59022	2122123312	59096	3421342112	59170	3221323321	59244	3221213234
58875	1223111234	58949	2322434324	59023	1122123244	59097	3321334443	59171	2321323312	59245	2321213233
58876	1123111232	58950	12224343243	59024	3422123232	59098	3221334434	59172	2221323311	59246	2121213232
58877	3422444312	58951	43224342312	59025	1122122344	59099	2321334432	59173	2121323244	59247	1121213223
58878	3222443443	58952	33224342311	59026	3422122244	59100	2221334423	59174	1221323243	59248	4321213243
58879	2122443434	58953	23224342243	59027	1122122234	59101	2121334422	59175	1121323234	59249	3421213234
58880	1122443423	58954	12224342134	59028	3422122133	59102	1221334421	59176	3421323232	59250	3321212332
58881	3422443421	58955	43224342132	59029	3222121243	59103	1121334414	59177	3221323223	59251	2321212244
58882	3222443343	58956	33224342121	59030	2122113444	59104	3421334434	59178	3421323221	59252	1221212243
58883	2122443312	58957	23224334443	59031	1122113434	59105	3221334432	59179	3221323212	59253	4321212134
58884	1122443244	58958	1222334423	59032	3422113422	59106	21213344323	59180	2221323211	59254	3421212133
58885	3422443232	58959	3422334312	59033	3222113421	59107	12213344322	59181	2121322344	59255	3321211244
58886	3222442312	58960	3222333444	59034	2122113344	59108	11213344321	59182	1221322343	59256	3221211243
58887	2122442311	58961	1222333434	59035	1122113312	59109	43213344311	59183	1121322334	59257	2321211234
58888	1122442243	58962	3422333422	59036	3422113243	59110	3421333444	59184	3421322321	59258	2221244423
58889	3422442133	58963	3222333421	59037	3222113232	59111	3221333441	59185	3221322312	59259	2121212434
58890	3222442132	58964	2122333244	59038	2122112344	59112	2221333434	59186	2221322311	59260	12212124312
58891	2122442121	58965	4322333232	59039	1122112334	59113	2221333432	59187	1221322244	59261	11212123444
58892	1122443443	58966	32223332312	59040	3422112243	59114	4321333422	59188	4321322234	59262	43212123423
58893	3422443432	58967	2122332311	59041	3222112234	59115	3421333421	59189	3321322232	59263	34212123422
58894	32224434423	58968	1122332243	59042	2122112134	59116	3321333244	59190	1121322134	59264	32212123421
58895	21224434422	58969	3422332133	59043	1122112133	59117	2321333243	59191	4321322132	59265	23212123344
58896	11224434421	58970	2322332132	59044	3422111243	59118	2121333234	59192	3321322123	59266	22212123312

## Toyota, Part 3 50001-69999

59267	2121123244	59301	1212442121	59335	1212432321	59369	1212333444	59403	1212234343	59437	2312212244
59268	1221123243	59302	4312434434	59336	4312432311	59370	3212333423	59404	4312233444	59438	1112212243
59269	4321122344	59303	3212434432	59337	3212432244	59371	2212333422	59405	3212233434	59439	3212212134
59270	3421122334	59304	2212434423	59338	2212432243	59372	1212333421	59406	2212233423	59440	2212212133
59271	3321122244	59305	1212434422	59339	1212432234	59373	4312333243	59407	1112233422	59441	1212211244
59272	2321122243	59306	4312434344	59340	3312432221	59374	2212333232	59408	3312233344	59442	4312211234
59273	1221122234	59307	3212434343	59341	2212432134	59375	1212332312	59409	2312233312	59443	3212124443
59274	1121122134	59308	2212434334	59342	1212432133	59376	4312332243	59410	2112233244	59444	2212124434
59275	4321121243	59309	1112434333	59343	4312432123	59377	3212332134	59411	1112233243	59445	1212124432
59276	3421113444	59310	3312434323	59344	3212432122	59378	2112332133	59412	3212232312	59446	4312124422
59277	3321113434	59311	2312434322	59345	2112432121	59379	1112332132	59413	2112232311	59447	2312124421
59278	3221113423	59312	2112434321	59346	1112432112	59380	3312331243	59414	4312232134	59448	2112124344
59279	2321113422	59313	1112434312	59347	3312431132	59381	3212331132	59415	3212232133	59449	1112124343
59280	2221113344	59314	3312433444	59348	2312431234	59382	2112324423	59416	2112232132	59450	3312124333
59281	2121113244	59315	2312433443	59349	2112431232	59383	1112324343	59417	1112231243	59451	2312124332
59282	1221113243	59316	2112433434	59350	1112431221	59384	3312323444	59418	3312224423	59452	2112124323
59283	1121113232	59317	1112433432	59351	3312431132	59385	2312323434	59419	2212224343	59453	4312124321
59284	4321112334	59318	3312433422	59352	2312344423	59386	2112323423	59420	1112224312	59454	3212124312
59285	3421112244	59319	2312433421	59353	2112344343	59387	4312323421	59421	3312223434	59455	2212123444
59286	3321112243	59320	2112433344	59354	1112344312	59388	3212323344	59422	2312223423	59456	1212123443
59287	3221112234	59321	4312433321	59355	3312343423	59389	2212323312	59423	2312223421	59457	4312123432
59288	2212444343	59322	3212433312	59356	2312343422	59390	1212323244	59424	1212223344	59458	3212123423
59289	1212444312	59323	2212433311	59357	2112343421	59391	4312323232	59425	3312223244	59459	2112123422
59290	4312443423	59324	1212433244	59358	1112343312	59392	2312322344	59426	2112223243	59460	1112123421
59291	3212443422	59325	4312433234	59359	3312343243	59393	2112322343	59427	2112221243	59461	3312123343
59292	2212443421	59326	2312433233	59360	2312343232	59394	1112322334	59428	1112213444	59462	2312123334
59293	1212443312	59327	2112433232	59361	2112342312	59395	3212322311	59429	3312213423	59463	2112123332
59294	4312443243	59328	1112433223	59362	1112342311	59396	2112322244	59430	2312213422	59464	1112123321
59295	3212443232	59329	3212433221	59363	3312342134	59397	4312322234	59431	1212213421	59465	3312123244
59296	2212442312	59330	2212433212	59364	2312342133	59398	2312322134	59432	4312213312	59466	2312123243
59297	1212442311	59331	1212433211	59365	2112342132	59399	2112322133	59433	3212213244	59467	2112123234
59298	4312442134	59332	4312432343	59366	1112342121	59400	4312321243	59434	2212213243	59468	1112123233
59299	3212442133	59333	3212432334	59367	3212334343	59401	3212321132	59435	1112213232	59469	3212123223
59300	2212442132	59334	2212432332	59368	2212334312	59402	2212234423	59436	3312212334	59470	2112122344



## Interchangeable Core Cylinders

Covers all this...

- Best/Falcon/Arrow/Eagle/(A2)
- Best A3
- Best A4
- Corbin X Removable Core
- Corbin Z Removable Core
- Russwin Removable Core
- Emhart System 70 Removable Core
- Sargent Removable Core
- Schlage, Yale, Lockwood
- Medeco Removable Core

CLICK HERE TO LEARN MORE



## Toyota, Part 3 50001-69999

59471 1112122343	59505 4311333423	59539 1211323223	59573 1211223421	59647 2244233311	59721 3243433221
59472 3312122332	59506 2211333422	59540 2311323221	59574 3211223312	59648 3244233243	59722 3443433211
59473 2112122244	59507 4311333244	59541 1211323212	59575 2111223244	59649 3444233233	59723 2243432344
59474 4312122234	59508 2211333243	59542 3211322343	59576 3311223232	59650 1244233232	59724 2243432334
59475 2312122134	59509 3311332312	59543 2111322334	59577 2111222344	59651 2344233222	59725 2343432321
59476 2112122133	59510 2211332311	59544 3311322321	59578 3311222134	59652 3244233212	59726 3343432311
59477 1112121244	59511 4311332134	59545 2211322312	59579 2211222133	59653 3444232344	59727 1243432244
59478 3312121234	59512 2211332133	59546 4311322243	59580 4311213444	59654 2244232343	59728 2343432234
59479 2312113444	59513 4311331243	59547 2311322234	59581 2311213434	59655 3244232332	59729 3343432221
59480 2112113434	59514 2311331132	59548 4311322134	59582 1211213423	59656 3444232312	59730 1243432134
59481 1112113423	59515 1211324443	59549 2311322133	59583 3211213344	59657 2244232311	59731 2243432132
59482 3312113344	59516 3211324432	59550 1211322132	59584 2111213244	59658 3244232243	59732 3243432122
59483 2312113244	59517 2111324423	59551 3211322144	59585 3311213232	59659 3444232232	59733 3243432112
59484 2112113243	59518 3311324421	59552 2111321243	59586 2211212344	59660 3444232134	59734 2243432111
59485 1112113232	59519 2211324344	59553 3311321232	59587 4311212244	59661 2244232133	59735 3243431243
59486 3312112334	59520 4311324334	59554 2211321134	59588 2311212243	59662 3244232123	59736 3443431232
59487 2312112244	59521 2211324333	59555 4311234343	59589 3211212234	59663 3344232121	59737 3243431221
59488 2112112243	59522 4311324323	59556 2311234312	59590 321124423	59664 1244232112	59738 3243431132
59489 1112112234	59523 2311324322	59557 1211233444	59591 4311123444	59665 2344231244	59739 3443344423
59490 3211344423	59524 1211324321	59558 3211233423	59592 2211213434	59666 3344231234	59740 1243344343
59491 2111344343	59525 3211324311	59559 2111233422	59593 3211123422	59667 1244231232	59741 2243343434
59492 3311343434	59526 2111323444	59560 3311233344	59594 4311123244	59668 2344231134	59742 2343343422
59493 2211343423	59527 3311323434	59561 2211233312	59595 2211123243	59669 3344231121	59743 3243343312
59494 4311343421	59528 2211323432	59562 4311233243	59596 3211122344	59670 1244224423	59744 3443343243
59495 2311343312	59529 4311323422	59563 2311233232	59597 4311122244	59671 2344224312	59745 3443342312
59496 1211343244	59530 2311323421	59564 1211232312	59598 2211122243	59672 3344223423	59746 2243342311
59497 3211343232	59531 1211323344	59565 3211232134	59599 3244344312	59673 3444223421	59747 3243342134
59498 2111342312	59532 2211323334	59566 2111232133	59600 3444343422	59674 2244223344	59748 3343342132
59499 3311342243	59533 3311323321	59567 3311231243	59601 2244343421	59675 3244223244	59749 1243342121
59500 2211342134	59534 2211323312	59568 2211224423	59602 3244343243	59676 3444223232	59750 1243334312
59501 4311342132	59535 4311323244	59569 4311224312	59603 3444342312	59677 1244222344	59751 1243332311
59502 2311334423	59536 2311323243	59570 2311223444	59604 2244342311	59678 2344222312	59752 1243332134
59503 4311334312	59537 1211323234	59571 1211223434	59605 3244342134	59679 3244222134	59753 2243332121
59504 2311333444	59538 2311323232	59572 3211223422	59606 3444342132	59680 3444222132	59754 2243331132
			59607 2244342121	59681 3444221243	59755 2343324343
			59608 2344334343	59682 2244221132	59756 3343323444
			59609 3244333434	59683 3244213423	59757 3443323423
			59610 3344333422	59684 3444213421	59758 1243323422
			59611 1244333421	59685 2244213344	59759 2243323344
			59612 2244333243	59686 3244213244	59760 2343323244
			59613 2344332312	59687 3444213232	59761 2243323232
			59614 3344332243	59688 2244212344	59762 3243322334
			59615 1244332134	59689 3244212312	59763 3443322311
			59616 2244332132	59690 3444212244	59764 2243322244
			59617 3244331243	59691 2244212243	59765 3243322234
			59618 3444324423	59692 3244212134	59766 3443322133
			59619 2244324343	59693 3444212132	59767 1243322132
			59620 3244323434	59694 2244212121	59768 2343321243
			59621 3444323422	59695 3244211243	59769 3343234423
			59622 2244323421	59696 3444211134	59770 3443234312
			59623 3244323312	59697 2244211132	59771 2243233444
			59624 3444323243	59698 3243443423	59772 2243233423
			59625 2244323232	59699 3443443421	59773 3243233421
			59626 3244322334	59700 2243443312	59774 3243233312
			59627 3444322311	59701 3243443232	59775 3443232343
			59628 2244322244	59702 3443442311	59776 3443232312
			59629 3244322234	59703 2243442243	59777 2243232311
			59630 3444322133	59704 3243442133	59778 3243232134
			59631 2244322132	59705 3443442121	59779 3343232132
			59632 3244321243	59706 2243434432	59780 1243232121
			59633 3444234432	59707 3243434422	59781 2343231132
			59634 2244234423	59708 3443434343	59782 3343224343
			59635 3244234421	59709 3443434332	59783 1243224312
			59636 3444234334	59710 3443434322	59784 2343223434
			59637 1244234333	59711 2243434321	59785 3343223422
			59638 2344234323	59712 3243434311	59786 3443223344
			59639 3344234321	59713 3243433434	59787 2243223312
			59640 1244234312	59714 3243433423	59788 3243223243
			59641 2344233443	59715 3443433421	59789 3343223444
			59642 3344233432	59716 1243433344	59790 1243222334
			59643 1244233423	59717 1243433312	
			59644 2344233421	59718 2243433244	
			59645 3244233343	59719 2243433234	
			59646 3444233312	59720 2243433223	

## IC Cores: Small Format



Everything you  
ever need to  
know about how  
to sell, service,  
install and  
troubleshoot  
interchangeable  
cores!

CLICK HERE TO LEARN MORE



# TheNationalLocksmith.com

Technical forums, chat, online store, plus  
visit our sponsors...

## WEB REVIEW

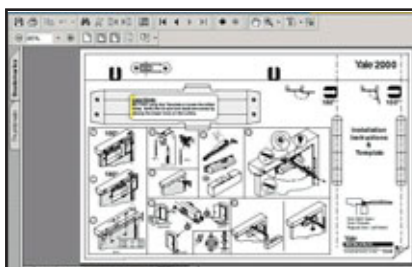
### Yale Security Group

<http://www.yalesecurity.com/>

This is one of the better locksmith oriented web sites we have ever seen. Among the companies within the Yale Security Group are: ASSA/Abloy, Corbin/Russwin, Intellikey, Norton, Rixon and Yale.

Besides tons of company information, you can review a great depth of product information online. And one of the best sections of all is under the Literature button. There, you can pull down installation instructions and templates for most of the products.

Also, a product selector walks you through the process of correctly specifying an electronic door control or electronic strike. Also of interest is a Training button, where you can get class information and register online. Nice site!



#### A&B Safe Corporation



[www.a-bsafecorp.com](http://www.a-bsafecorp.com)

#### Adesco Safe Manufacturing Co.



[www.adesco.com](http://www.adesco.com)

#### DiMark International



[www.dimarkinternational.com](http://www.dimarkinternational.com)

#### Discount Safe Co., Inc.



[www.discountsafecoinc.com](http://www.discountsafecoinc.com)

#### Dynalock Corp.



[www.dynalock.com](http://www.dynalock.com)

#### Framon Mfg. Co.



[www.framon.com](http://www.framon.com)

#### Herbert L. Flake Co.



[www.hlflake.com](http://www.hlflake.com)

#### HPC, Inc.



[www.hpcworld.com](http://www.hpcworld.com)

#### Indiana Cash Drawer Co.



[www.icdpos.com](http://www.icdpos.com)

#### International Locking Devices, Ltd.



[www.gatelock.com](http://www.gatelock.com)

#### Jet Hardware Mfg. Co.



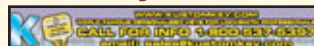
[www.jetkeys.com](http://www.jetkeys.com)

#### KSP



[www.iccore.com](http://www.iccore.com)

#### KustomKey



[www.kustomkey.com](http://www.kustomkey.com)

#### MAG Security



[www.magecurity.com](http://www.magecurity.com)

#### Major Manufacturing



[www.majormfg.com](http://www.majormfg.com)

#### McDonald DASH Locksmith Supply



[www.mcdonalddash.com](http://www.mcdonalddash.com)

#### MDS, Inc.



[www.mdsincorporated.com](http://www.mdsincorporated.com)

#### Monaco Lock



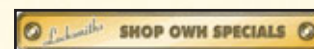
[www.monacolock.com](http://www.monacolock.com)

#### National Auto Lock Service, Inc.



[www.laserkey.com](http://www.laserkey.com)

#### Omaha Wholesale Hardware



[www.omahawh.com](http://www.omahawh.com)

#### ROFU International Corp.



[www.rofu.com](http://www.rofu.com)

#### SecuraKey



[www.securakey.com](http://www.securakey.com)

#### Security Resources, Inc.



[www.techtrainproductions.com](http://www.techtrainproductions.com)

#### Select Products Ltd.



[www.select-hinges.com](http://www.select-hinges.com)

#### Sieveking Products Co.



[www.sievekingprodco.com](http://www.sievekingprodco.com)

#### Tech-Train Productions



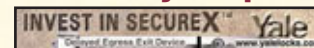
[www.techtrainproductions.com](http://www.techtrainproductions.com)

#### TekTone



[www.tektone.net](http://www.tektone.net)

#### Yale Security Group



[www.yalesecurity.com](http://www.yalesecurity.com)

Manufacturers and distributors... join the high profile locksmith web site and you'll be featured here!

Call Jeff Adair (ext. 15) or Debbie Schertzing (ext. 16) for details. (630) 837-2044

TLI

April 2002 • 157



## TEST DRIVE!

**H**ow many times have you wished you had a third hand? For a service technician, there are always times when a third hand would be invaluable, especially when installing door hardware. There are always times when it would sure be nice to have someone "hold this in place," or "help move that there." Sometimes two hands just aren't enough.

Knowing this, A-1 Security Manufacturing Corp. has developed the K100 Kelly-Klump.

### PRODUCT:

The Kelly-Klump is designed to assist with the installation of electromagnetic lock installation. It is designed to hold the lock in a predetermined location, allowing you to complete the installation single handedly.

We all know the difficulty of installing hardware that is positioned over our head, or working off a ladder to reach something. The fatigue factor greatly increases when working with our hands over our heads, and we all know the potential hazards of working from a ladder. Neither of which make for ideal working conditions. If you have a number of electromagnetic locks to install, holding the lock with one hand over your head and trying to drill mounting holes with the other, or just driving mounting screws with the other, would be rather fatiguing rather quickly. Not to mention the possibility of the lock slipping out of your hand and smacking you on the forehead. Yes, there is an easier way, and the Kelly-Klump offers it.

### DESIGN:

The Kelly-Klump consists of two self-adjusting arms that clamp on top of the

## Kelly Klump

by A-1 Security Manufacturing Corp.

doorframe. A simple five-point knob with a nylon padded leveling guide is used to secure the electromagnetic lock in place. It's a simple, effective, easy to use design.

### CONSTRUCTION:

Made from lightweight anodized aluminum, and weighing in at a mere 10 ounces, the Kelly-Klump is sure to last a lifetime. The only foreseeable part that may need replacing over time is the arm return torsion springs.

### HOW to USE:

The Kelly-Klump will work on doorframes up to 9-1/2" wide. Simply spread the spring-loaded arms until it fits over the doorframe. The spring-loaded arms will close and self align the jig in the center of the frame.

Place the electromagnetic lock in the desired position, center the Kelly-Klump with the electromagnetic lock and tighten the five-point knob clockwise until the lock is snug against the header. Drill the mounting holes, drive in the mounting screws, remove the Kelly-Klump and all that's left is to wire the electricity. It doesn't get much easier than that.

### PRICE:

The K100 Kelly-Klump carries a suggested retail price of \$74.50.

### MODIFICATIONS & IMPROVEMENTS:

The only criticism I have with the Kelly-Klump is it will only work on doorframes that have a top ledge for the jig to hang from. Almost all interior doorframes will have a top lip. However, this is not true with many exterior brick, or cinder block constructions. Often there is not a top lip, for which the Kelly-Klump would not be applicable.

There is, however, a simple solution. By drilling and tapping two 1/4" holes near the top of the holding arms and threading about a 4" thumb-screw in,



the Kelly-Klump can now be used on most threshold styles. Simply extend the holding arms, lock down the thumbscrews to the brick or cinder block header, and your back in business.

### COMMENTS:

This is one of those tools that most of us wouldn't think about. When installing electromagnetic locks, the normal process is to place a template or the lock itself on the frame header. Hold it above our heads with one hand and mark the mounting holes with a scribe or pencil. Remove the template or lock and drill the mounting holes. Reposition the lock on the header, holding it with one hand while we balance a mounting screw precariously on the tip of a screwdriver and aim it at the hole. As the screw falls off, we remove the lock, bend over to retrieve the screw that has rolled under a desk, and start the process over again. They say the second time is the charm. You've done this, haven't you? Yes you have. The Kelly-Klump is looking better all the time, isn't it? Yes it is.

If you install electromagnetic locks, I don't see why you would want to be without the Kelly-Klump... unless of course, you are the type who just likes doing things the hard way.

For more information phone: (877) 725-2121, (804) 359-9003; Fax: (804) 359-9415; Email: [fmcc@demandal.com](mailto:fmcc@demandal.com); Web: [www.demandal.com](http://www.demandal.com). Circle 241 on Rapid Reply. **TNL**

### IN SUMMARY:

**DESCRIPTION:** The Kelly-Klump is designed to ease the installation of electromagnetic locks.

**PRICE:** \$74.50

**COMMENTS:** It's a simple, effective, easy to use tool.

**TEST DRIVE RESULTS:** I don't see why you would want to be without the Kelly-Klump.